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Mental health care providers' cultural competency related to the culture of athletics is crucial to their clinical care provision for collegiate student-athletes. However, little research has been conducted in applying a theoretical framework to explore providers' intentions to provide culturally competent care to this specific student population. Understanding providers' perceptions of student-athletes is integral in assuring clinical care provision that is culturally responsive related to the culture of athletics. This study aimed to investigate the antecedents that affect mental health care providers' levels of cultural competency specific to the collegiate student-athlete population and explore the determinants of providers' intention to be culturally responsive to the unique needs of collegiate student-athletes. An adapted Theory of Planned Behavior (TPB) was developed as the theoretical research framework. The extension was implemented by incorporating three new variables: self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, and knowledge related to the culture of athletics. Data were collected using an online survey method and analyzed using structural equation modeling and multiple regression analysis. The results indicated that all scales in the survey were reliable on which to base the results of the data analysis. The percentage of student-athletes on a mental health care provider's caseload was the strongest predictor of the provider's self-efficacy, empathy, attitudes, and intention to provide culturally responsive clinical care to student-athletes. Results further revealed that self-efficacy related to communicating with student-athletes,

empathy specific to student-athletes, and positive attitudes related to the culture of athletics are all individually predictive of intentions to provide culturally responsive clinical care. This supports the study's conceptual model to be used in future research about student-athlete mental health. Results indicate the need for professional development specific to this student population, and suggestions for further research are discussed.

THE ROLE OF CULTURAL COMPETENCY IN THE PROVISION OF CLINICAL MENTAL HEALTH CARE FOR COLLEGIATE STUDENT-ATHLETES

by

Lindsey D. Sanders

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Approved by

_____
Committee Chair

This dissertation is dedicated to my parents for their endless love, support, and encouragement. Without their Thursday afternoon pick-me-ups, Friday morning grocery deliveries, Saturday tailgate parties, and Sunday evening cookouts, I would not have made it to every Monday filled with encouragement and determination.

Don’t worry, Dad, this is my last degree!

APPROVAL PAGE

This dissertation, written by LINDSEY D. SANDERS, has been approved by the following committee of the Faculty of The University of North Carolina at Greensboro.

Committee Chair _____
David L. Wyrick

Committee Members _____
Emily Kroshus

_____
Michael A. Perko

_____
Jay Poole

_____
Kelly L. Rulison

_____
Date of Acceptance by Committee

_____
Date of Final Oral Examination

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CHAPTER I

BACKGROUND AND STUDY INTRODUCTION

Statement of the Problem

According to the National Collegiate Athletic Association (NCAA), there are over 494,000 student-athletes who compete in sanctioned athletics nationwide (NCAA, 2020). While intercollegiate athletics provide a unique opportunity allowing young adults to explore athletic and academic pursuits, many student-athletes find this experience challenging and struggle with the cultural norms of a rigorous mental and physical environment (Childers, 2019; Etzel et al., 2006). Failure to navigate this experience successfully has the potential to negatively impact student-athletes' psychological well-being (Etzel et al., 2006; Kim et al., 2020). Along with their non-athlete counterparts, student-athletes are likely to encounter the typical "college struggles" (e.g., adjustment difficulties, social isolation and withdrawal, difficulty coping, identity confusion) during their 4-5 years on campus (Bissett & Tamminen, 2020; Etzel, 2009). However, given the additional demands (e.g., competitive pressures, practice, injury and rehabilitation, strength and conditioning, competition, travel, tutors, study hall hours) of being an athlete, student-athletes may experience additional psychological distress that could result in various negative outcomes including, but not limited to: performance obstacles and anxiety, prolonged injury rehabilitation, disordered eating and eating disorders, identity confusion, and un/expected retirement from sport (Bissett & Tamminen, 2020; Carr &

Davidson, 2014; Coppel, 2014; Hack, 2007; Klenck, 2014). Additionally, past research has shown that collegiate student-athletes and non-athletes experience depression at similar rates, despite the common perception that athletes are "immune" to various mental health concerns (Armstrong et al., 2015; Maniar et al., 2005; Wolanin et al., 2015). Finally, it has been consistently and historically shown that at least 15% to 20% of student-athletes who experience mental health concerns do not seek mental health services, partially out of fear that a provider would not understand the culture of athletics (Hinkle, 1994; Mackenzie et al., 2014; Moreland et al., 2018; Murray, 1997; Parham, 1993; Watson & Kissinger, 2007).

In recent years, the NCAA has openly recognized that mental health concerns are serious in intercollegiate athletics. Along with new regulations, the NCAA has, and continues to raise awareness of student-athletes' mental health needs, requiring member NCAA institutions to create and implement mental health protocols that include access and/or referral to licensed mental health professionals (Klenck, 2014; NCAA SSI, 2016; Way et al., 2019). Researchers and sport psychology professionals have long called for in-house mental health services within intercollegiate athletics (Connole et al., 2014; Hack, 2007; López & Levy, 2013). When mental health services are not provided "in-house," student-athletes may encounter barriers to seeking services independently. For example, a student-athlete may feel misunderstood and less likely to develop a relationship with a mental health professional who has little-to-no background or understanding of sports or collegiate athletics (Hack, 2007). Additionally, most university counseling centers operate during normal business hours, often coinciding with classes,

practice, and competition schedules, making it difficult for student-athletes to attend counseling sessions (López & Levy, 2013). It is also common for campus counseling centers to become overbooked and restrict students to a fixed number of sessions, making it even more challenging to meet student-athletes' needs in a timely manner (Gill, 2008; Goodwin, 2017). Thus, professionals trained and knowledgeable in working with this population can make a case for providing student-athletes with more accessible mental health services.

Many athletics departments are still in the early stages of developing mental health protocols and creating accessibility to mental health services for collegiate student-athletes. While some athletics departments already provide sport psychology services, not all sports psychologists are qualified to work with student-athletes who are experiencing clinical mental health concerns (e.g., depression, anxiety, eating disorders) that may be impeding student-athletes' ability to perform athletically, academically, and personally. There is no clear or single path to becoming a sport psychology professional. For instance, a sport psychology professional and a clinical sport psychologist are very different with respect to training, competencies, general expertise, qualifications, and scope of practice. A clinical sport psychologist can help student-athletes improve their sport performance (e.g., imagery, goal setting, progressive muscle relaxation, focus) and address other, more clinical, psychological concerns (e.g., depression, severe anxiety, adjustment disorders). On the contrary, a sport psychology professional is more interested in how psychology influences athletic performance, exercise, and physical activity. These professionals work with student-athletes and coaches to improve athletic performance

and increase motivation without the license needed to address clinical mental health concerns.

Despite many university athletics departments having various sport psychology services available to their student-athletes, stigma seems to surround the culture of mental health practice, particularly in collegiate athletics (Castaldelli-Maia et al., 2019; Chow et al., 2020; López & Levy, 2013). Stigma occurs when a certain need or behavior is labeled as disgraceful or shameful. Thus, self-stigma may occur when student-athletes internalize these beliefs and allow them to diminish their self-esteem and/or ability to set and reach goals. For example, student-athletes who suffer from mental illness or seek mental health or sport psychology services may fear being stereotyped as weak or incompetent (Goodwin, 2017; Reich, 2019; Watson & Kissinger, 2007).

Purpose of the Study

Research has explored athletic directors' and coaches' perceptions and preferences in regards to sport psychology professionals. However, there is no existing literature that explores clinical mental health care providers' self-efficacy, empathy, attitudes, and knowledge toward providing clinical services and support to collegiate student-athletes. The purpose of this study was to investigate factors that predict athletics cultural competency among clinical mental health care providers on college and university campuses and their intentions to be culturally responsive when providing clinical mental health care to collegiate student-athletes.

The goal of this study was to investigate the antecedents that affect mental health care providers' levels of cultural competency specific to the collegiate student-athlete

population and explore the determinants of providers' intentions to be culturally responsive to the unique needs of collegiate student-athletes. The findings are expected to have implications for various campus support services, including counseling centers, student health clinics, and athletics departments.

Theory of Planned Behavior

The Theory of Planned Behavior (TPB) started as the Theory of Reasoned Action in 1980 to predict an individual's intention to engage in a behavior at a specific time and place. Developed by Ajzen (1985), TPB is an explanatory model that has been widely applied in diverse studies on behavioral intention (Ajzen, 2012a; Ajzen, 2012b; Ajzen & Fishbein, 2005; Fraser et al., 2010; Lee et al., 2010; Yakasai & Jusoh, 2015). The TPB has been used successfully to predict and explain a wide range of health behaviors and intentions, including smoking, drinking, health services utilization, breastfeeding, and substance use, among others.

The TPB states that behavioral achievement depends on both motivation (intention) and ability. Then, it suggests that behavioral intention, in turn, is determined by five major determinants—attitude towards the behavior, subjective norms, social norms, perceived power, and perceived behavioral control. Meaning that the degree to which individuals see a certain behavior positively (attitude), or foresees that substantial others want them to engage in the behavior (subjective norm), and believe that they are capable of carrying out the behavior (perceived behavioral control), serve as direct determinants of the extent of their intention to perform the behavior (Ajzen, 1991). By and large, attitudes are the overall evaluation of the behavior by the individual (Ferdous,

2010). These judgments are determined by beliefs pertaining to the extent to which one has access to resources or opportunities necessary to carry out the behavior effectively (Ajzen, 1991).

Conceptual Model

Although the Theory of Planned Behavior is a well-researched theory, it should be noted that there are several limitations of the TPB, including the assumption that the person had opportunities and acquired resources to be successful in performing the desired behavior, regardless of the intention. To explore the factors influencing clinical mental health care providers' intentions to provide culturally responsive care to collegiate student-athletes, we built a theoretical model based on the Theory of Planned Behavior (TPB). Our research adapted the TPB by incorporating three variables (self-efficacy, empathy, and knowledge) and investigated how these variables influence an individual's clinical care provision to collegiate student-athletes. This was the first time three variables were incorporated together into the TPB to understand mental health care providers' behaviors, to the best of our knowledge.

Like the TPB, our model suggests that behavioral achievement depends on motivation (intention) and ability. It comprises four variables that collectively represent a person's actual control over the behavior: self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes toward the culture of athletics, and knowledge related to the culture of athletics. The research model used in this study predicts mental health care providers' behavior by grafting the predictive model based on our operationalization of the term 'cultural competency.' For this study,

cultural competency is defined by a clinical mental health care provider's self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, attitudes toward the culture of athletics, and knowledge related to the culture of athletics. According to our model, a provider's level of cultural competency predicts their cultural responsiveness and, ultimately, clinical care provision that is competent related to the culture of athletics.

Research Questions

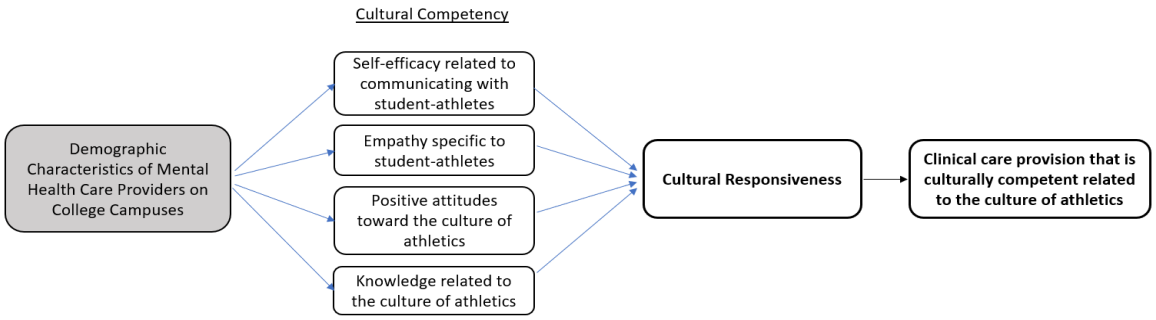
1. Are there demographic differences that impact a clinical mental health care provider's self-efficacy, empathy, attitudes, and knowledge toward treating collegiate student-athletes with mental health concerns?
2. To what extent are self-efficacy, empathy, attitudes, and knowledge associated with a clinical mental health care provider's intention to provide culturally competent clinical care to collegiate student-athletes?

The following conceptual model was established to analyze the structural relationship of the adapted Theory of Planned Behavior in providing clinical mental health care to this population. (Figure 1). The left side of Figure 1 depicts the first research question addressed in this study: Are there demographic differences that impact a clinical mental health care provider's self-efficacy, empathy, attitudes, and knowledge toward treating collegiate student-athletes with mental health concerns? To verify the influence of individual demographic variables (e.g., gender, race, type of clinical license, years in practice), we examined their effects on outcome variables (self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive

attitudes toward the culture of athletics, and knowledge related to the culture of athletics). We then attempted to determine how those outcome variables affect a mental health care provider's intention to be culturally responsive in providing clinical mental health care to student-athletes. To be effective in their roles, it is generally expected for providers to enjoy helping others and possess certain attributes such as excellent communication skills, acceptance, flexibility, self-awareness, and multicultural competency. To our knowledge, however, this is the first study to determine which specific attributes and skills affect a provider's intention to be effective in their roles, specifically related to providing care for collegiate student-athletes.

Figure 1

Conceptual Model



The second column in Figure 1 includes variables that we used to define cultural competency. We suggest that cultural competency specific to athletics comprises (a) self-efficacy related to communicating with student-athletes; (b) empathy specific to student-athletes; (c) attitudes toward the culture of athletics; and (d) knowledge related to the culture of athletics. Our model predicts that mental health care providers with high levels

of cultural competence will have higher intentions to be culturally responsive and ultimately provide clinical care that is culturally competent related to the culture of athletics. This will be tested in the second research question: To what extent are self-efficacy, empathy, attitudes, and knowledge associated with mental health care providers' intentions to provide culturally competent clinical care to collegiate student-athletes? The variables used to operationalize cultural competency in this study were informed by the NCAA Campus Stakeholder's Guide for Student-Athlete Mental Health (see Appendix A). Recommended by the NCAA Task Force to Advance Mental Health Best Practice Strategies, this guide is a resource designed for stakeholders who work outside of athletics to understand the unique cultural aspects of collegiate student-athletes and clinical approaches for working with student-athletes.

Why I am Qualified to Lead This Study

I identify as both a Licensed Clinical Social Worker and a Community Health Educator. I have more than 20 years of experience working with collegiate and professional athletes in various capacities, including gameday event programming, personal/business management, program development, community education, and direct clinical practice. This puts me in a unique position to address student-athletes' mental health needs through both tertiary and primary prevention techniques. This study considered relevant theoretical approaches popular in Public Health Education and Clinical Social Work, ultimately basing our work on the adapted Theory of Planned Behavior. My research suggests a lack of academic literature related to clinical mental health care provision to student-athletes. I am passionate about my work and hope to use

that passion to increase awareness of student-athletes' unique needs. It is important to not only treat them as individuals but to consider them as a small part of a much larger collegiate athletics system.

Definition of Terms

NCAA (National Collegiate Athletic Association): The National Collegiate Athletic Association is a member-led organization dedicated to college student-athletes' well-being and lifelong success.

Cultural competence is the ability to understand, communicate with and effectively interact with people across **cultures**. For this study, **Cultural competence** builds on this idea and refers specifically to a mental health care provider's self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes toward the culture of athletics, and knowledge related to the culture of athletics.

The **Stakeholder's Guide for Student-Athlete Mental Health**, recommended by the NCAA Task Force to Advance Mental Health Best Practice Strategies, is a resource designed for college counseling center clinicians and other student health center employees who work with student-athletes who present with mental health concerns. (See Appendix X for more information about the NCAA Stakeholder's Guide).

An **LCSW** is a **Licensed Clinical Social Worker.** This is the mental health counseling specialty of social work, which requires a significant degree of training after graduating with a Master of Social Work (MSW) degree. LCSWs practice using strengths-based methodologies, meaning they work with clients to find natural skills and

talents they possess to help them address issues causing hardship in their lives. The social work framework for mental health therapy is holistic, taking into account the individual client's emotional and psychological makeup, as well as societal and environmental factors that can impact the well-being of the client.

An **LPC** is a **Licensed Professional Counselor**. The LPC offers a method of mental health counseling that is very individually-based and tends to have a more flexible outlook on methodologies than social work or psychology. Due to this, LPCs are often able to use more novel approaches and develop therapies that they find effective while operating within the ethical guidelines and legal standards for the counseling profession. In most cases, LPC's work with the client on a primarily internal and individual level, ensuring the client's focus is on what they can do within their life to change things. This is a substantial difference from social work wherein an analysis of the client's economic and societal situation, as well as their current home environment, plays a substantial role in the therapy.

A **Clinical Psychologist** is a mental health professional with specific training based on clinical psychological research into human behavior. One must usually earn a minimum of a Master of Psychology degree, with many states requiring a Doctorate before one can become licensed to practice psychology. Psychology is a discipline that has studied the mental processes and behavioral patterns of human beings for over 100 years. Many professionals in psychology work with clients in a cognitive behavioral method wherein they try to encourage the client to change thinking through behaviors, as well as change behaviors through new methods of thinking. Psychology is an internalized

discipline that works almost exclusively with the individual and their internal psychology.

CHAPTER II

REVIEW OF THE LITERATURE

Epidemiology of Student-Athlete Mental Health

In 2019, young adults aged 18-25 years had the highest prevalence of any mental illness (29.4%) compared to other age groups (National Institute of Mental Health [NIMH], 2020). In that same year, 3 out of 5 college students reported overwhelming anxiety; and more than 40% felt so depressed they had difficulty functioning (American College Health Association [ACHA], 2020). Awareness of mental illness and the need for treatment has been growing in recent years. Despite this progress, between 60 and 80 percent of college students with mental health concerns do not seek treatment (Lipson et al., 2018; Oswalt et al., 2020; World Health Organization [WHO], 2019).

According to the latest Association for University and College Counseling Center Directors Annual Survey (AUCCCD, 2019), anxiety continues to be the most frequent concern among college students (60.7%), followed by depression (48.6%), stress (47.0%), family concerns (29.0%), specific relationship concerns (27.0%), academic performance difficulties (26.2%), sleep disturbance (17.7%), social isolation/ loneliness (17.5%), trauma (17.2%), adjusting to a new environment (17.0%), suicidal thoughts (14.4%), and eating/body image concerns (13.6%). During this reporting period, 87.3% of counseling center directors reported increased demand for counseling services. On average, 12.2% more students were served in 2019 than in 2018. This study suggests that

19.7% of college counseling centers have counselors embedded in other offices on campus. Counselors embedded in athletics are found to spend 26.3 weekly hours in athletics, equal to 65.8% of their time. The utilization of counseling centers by diverse groups is generally proportionate to the general student body. The significant deviation from this was with student-athletes. The NCAA (2018b) reported that the number of collegiate student-athletes reached an all-time high in the previous year, with an increase of more than 50% from 2017. However, during that time, the percentage of student-athletes accessing mental health care on campus remained steady at approximately 8.2% (AUCCCD, 2019).

Although the prevalence rates of mental disorders in young people are high, teens and young adults do not often seek medical or professional help (Gulliver et al., 2012; Haavik et al., 2017). Student-athletes tend to fall within this high-risk group. The positive benefits associated with participation in collegiate athletics are well documented. However, for some student-athletes, their participation may lead to maladjustment, emotional illness, and psychological distress (Balcombe & De Leo, 2020; Bissett & Tamminen, 2020; Ramaeker & Petrie, 2019). A trailblazer in the field of Sport Sciences, Etzel (1989) noted that the challenges and demands associated with being a student-athlete make these individuals more susceptible to mental and physical distress, leading others (Pinkerton et al., 1989; Sorkkila et al., 2019; Sudano et al., 2017) to view student-athletes as a special at-risk group. However, limited studies detail help-seeking behavior for mental disorders, specifically in collegiate student-athletes. Research devoted to assessing culture within collegiate athletics, specifically related to caring for student-

athletes who struggle with mental illness and other mental health concerns, is even more limited.

Culture of Collegiate Athletics Specific to Mental Health

To address the lack of awareness related to collegiate student-athletes' unique needs, we must first highlight the cultural differences between student-athletes and their other non-athlete peers. Research suggests that an important theme is the collegiate student-athlete's perception that athletes are very different than non-athletes (Fuller et al., 2017; Gulliver et al., 2012; Piper, 2020; Rubin & Moses, 2017). This was highlighted by the view that student-athletes were expected to behave differently and be more disciplined than the general college student population. This perception that they are subject to different rules may have implications for all of their behaviors, including help-seeking. Collegiate student-athletes may feel uncomfortable seeking help outside of the athletics department from service providers who may not understand unique concerns, needs, and pressures faced by student-athletes (Renn, 2020; Rubin & Moses, 2017; Wilkerson et al., 2020). For example, student-athletes often find it difficult to determine the difference between normal feelings of tiredness and sadness associated with their sport and symptoms of a possible mental disorder (Gulliver et al., 2012; Reardon et al., 2019). Despite the increased recognition recent research has given to the unique needs of student-athletes, many colleges and universities continue to focus only on maintaining academic eligibility and graduation rates rather than on enhancing the academic, personal, and athletic development of the student-athlete (Huml et al., 2019; Killebrew, 2020; Rubin & Moses, 2017). Partnerships should be established that include all groups

that have contact with the student-athletes. Counseling and advising programs that strive to be successful require the clinicians and staff to be culturally competent related to the culture of athletics and the unique needs of student-athletes.

Student-athletes are a population group with unique vulnerabilities whose mental health needs are often not met (Dean & Rowan, 2014). Because of the perception that they are young and healthy, collegiate student-athletes are often seen as free from mental health concerns and social problems. Yet student-athletes are at high risk for distress related to the following mental health challenges: pressure to perform (Armstrong et al., 2015; Pinkerton et al., 1989; Weigland et al., 2013); pressure to hide physical injuries or avoid showing pain (Conway et al., 2020; Mankad et al., 2009; Putukian, 2016); undiagnosed mental disorders (Armstrong et al., 2015; Ford, 2007; Nattiv et al., 1997; Sudano et al., 2017; Wippert & Wippert, 2008); substance abuse (Bracken, 2012; Grossbard et al., 2009; Miller et al., 2002; Milroy et al., 2014; Orsini et al., 2018); eating disorders (McLester et al., 2014; Ryan et al., 2018; Sesan, 1989); poor support systems (Dean & Rowan, 2014); pressure to be a role model (Bissett & Tamminen, 2020; Mankad et al., 2009; Raedeke et al., 2002); and pressure to conform (Dean & Rowan, 2014; Graupensperger et al., 2018). Additionally, student-athletes experience time demands and regimented schedules that discourage them from pursuing educational opportunities and expanding their social networks (Bissett & Tamminen, 2020; Navarro & Malvaso, 2015).

Student-athletes are diverse; they come from families of origin whose socioeconomic statuses may be upper class or part of the working-class poor. They may have various national identities, races/ethnicities, and may speak various languages.

Student-athletes experience a wide range of vulnerabilities that often go unaddressed, perhaps because of the perception that since they appear healthy and vibrant, they are free from social problems. Also, research has shown that collegiate student-athletes often deny emotional problems, which can be seen as a sign of weakness (Bissett & Tamminen, 2020; Pinkerton et al., 1989; Raedeke et al., 2002). Cox (2015) found an estimated 33% of Division I collegiate student-athletes self-identified as being depressed. Wolanin et al. (2016) found that 23% of Division I collegiate student-athletes met clinically relevant levels of depression. Suicide is also a central concern, ranking as the fourth leading cause of death in collegiate student-athletes (Rao & Hong, 2015); Moore (2015) found that 9% of student-athletes felt a moderate to severe need to seek suicide prevention.

Researchers suggest that collegiate student-athletes may be at an increased risk for experiencing psychological distress over their non-athlete peers (Bissett & Tamminen, 2020; Moreland et al., 2018). Many of these student-athletes are reluctant to seek help or confide in their coaches because of the perceived stigma attached to mental illness (Bissett & Tamminen, 2020). Student-athletes who have mental health concerns and compete in environments that reinforce the mental health stigma are less likely to seek care than those surrounded by a more supportive environment that facilitates caregiving to student-athletes (Schinke et al., 2017). While results indicate that collegiate student-athletes are less likely to seek help than non-athletes, many of these studies were undertaken more than 40 years ago and may not reflect current practices among athletes (Carmen et al., 1968; Pierce, 1969). Many barriers to help-seeking among young adults have been reported in the literature (Gulliver et al., 2010; Lyberg Rasmussen et al., 2017;

Powell et al., 2016). These include poor mental health literacy, attitudes and personal characteristics, stigma, and practical barriers such as lack of transport to services. While the barriers to help-seeking are similar for student-athletes and non-athlete students, the main two areas that affect collegiate student-athletes are attitudes and stigma (Gulliver et al., 2012; Sudano et al., 2017). Student-athletes may have less-positive attitudes toward seeking help from a professional than do non-athletes (Bird et al., 2018; Watson, 2005). Stigmatization of collegiate student-athletes seeking psychological services has been documented (Barnard, 2016; Kamm, 2005; Wahto et al., 2016). Other student-athletes and coaches may view those who seek help for mental health concerns as weak or unable to handle the pressure.

Clearly, student-athletes are at high risk for a variety of threats to their well-being. Sports psychologists are often thought of concerning student-athletes' mental health. However, the primary focus of sport psychology is on the student-athlete's performance. In contrast to sport psychology consultants, clinical psychologists and other licensed mental health care providers focus on how the environment and other influences may affect a person's overall health and well-being. They are trained as generalists and do not simply address problems that might be inhibiting performance (Dean & Rowan, 2014). Furthermore, they have special training in engaging vulnerable groups and in providing strengths-based, culturally informed services. Clinical mental health care providers also view collegiate student-athletes as part of a larger social system. They acknowledge the impact of forces such as racism, family dynamics, spirituality, sexuality and gender roles, and a history of trauma. These clinicians are equipped to conduct therapy, support or

educational groups for student-athletes, athletes' families, and friends to help everyone in the support system understand what the student-athlete needs to succeed in life, not just on the playing field. Mental health care providers on college campuses are experts in linking students with various campus partners, streamlining the flow of communication between all involved. They can act as liaisons between student-athletes, coaches, teammates, and other athletics staff, such as athletic trainers and team physicians.

To best understand and address student-athletes' needs with mental health concerns, there is a call for clinical mental health care providers on college campuses to develop sensitivity and sensibility towards the culture of athletics. It is critical to create safe spaces on college campuses that allow and enable student-athletes to be who and what they are. Clinical mental health care providers have a unique role to simultaneously focus on and provide attention to both the person and the person's environment, helping people interact more effectively with their environment (Kopelovich et al., 2020). Often, treating just the symptom of a problem is an inadequate response. As systems thinkers, clinically licensed mental health care providers on college campuses can identify deficiencies in larger social systems, such as universities or athletics conferences, which may affect coaching staff in unhealthy ways (Dean & Rowan, 2014). Advocacy for strengths-based approaches to mental health care can have positive system-wide impacts.

Given that there is evidence that collegiate student-athletes may be at risk for psychological disturbance (Gulliver et al., 2012; Melendez, 2006; Pinkerton et al., 1989; Renn, 2020) and possibly underutilizing college mental health services (Bissett & Tamminen, 2020), work must be done to create cultures where collegiate student-athletes

are encouraged to seek care and are supported throughout the treatment process. Studies show that student-athletes who consult a mental health care provider are criticized, compared to student-athletes who work with their coaches on the same problem (Elshire-Dulle, 2019). However, mental health concerns are serious and need to be addressed and treated by licensed professionals. It is important for coaches to create relationships that invite open communication with their student-athletes, but it is equally important for them to recognize when it is more appropriate to refer that person to a mental health care provider.

Student-Athlete Barriers to Mental Health Care

Prior research demonstrates the utility of examining athletics participation and student-athletes' mental health through a socio-ecological lens (Jeanes et al., 2013; Register-Mihalik et al., 2013). Per the socio-ecological framework, individuals make health decisions and enact health behaviors inside a complex social environment; the social environment influences these individuals and they, in turn, affect their social environment (Dahlberg & Krug, 2006). In the case of the collegiate student-athlete, the sociocultural views on mental health held by teammates, friends, family members, athletic trainers, coaches, as well as the local, regional, and national athletics administrative environment, impact how the student-athlete will respond to mental health-related challenges (Brown et al., 2014; Sudano et al., 2017). Likewise, more student-athletes utilizing mental health services should, in turn, impact mental health care providers' cultural views and responses to collegiate student-athletes' mental health needs.

Research demonstrates college students often do not recognize or admit their own mental health concerns. Additionally, many are unaware of available mental health services, including counseling and comprehensive treatment plans (Eisenberg et al., 2007; Hunt & Eisenberg, 2010). While collegiate student-athletes did report being more willing to seek help for a future mental health concern than their non-athlete counterparts, collegiate student-athletes were less likely to report receipt of mental health care (Brown et al., 2014). The perceptions and norms of the athletic team (e.g., teammates, coaches, and athletic trainers) and the social and cultural environment around the student-athletes (e.g., athletics department, school) impact how student-athletes view mental health care and those who seek mental health services (Moreland et al., 2018). Institutionally and environmentally, some college athletics facilities may lack appropriate resources tailored to the student-athlete in terms of confidentiality, convenience, and cultural sensitivity. Likewise, even if an athletics department or student services center provides student-athletes mental health care resources, the care provider charged with caring for the student-athletes may be under-qualified (Dwornik, 2014; Watson, 2003) or stretched too thin.

Collegiate athletics is a unique and demanding culture that provides both positive and negative attributes to a college experience (Carr & Davidson, 2014). For instance, many student-athletes succeed in the classroom in addition to competing at an elite athletic level but are often stretched too thin among their academic and athletic responsibilities (Etzel et al., 2002). Additionally, scheduling and commitment conflicts are typical within the collegiate student-athlete experience. In some cases, non-

performance issues (e.g., life balance, relationship issues, family issues, financial issues) can impact student-athletes just as much as performance-related issues (e.g., performance anxiety, lack of focus, negative self-talk). Thus, sport psychology and mental health professionals may serve as an ideal support network for student-athletes, helping them succeed in academics and athletics (Friesen & Orlick, 2010; Sullivan & Nashman, 1998). However, research has revealed that student-athletes historically hold negative attitudes toward seeking mental health and sport psychology services, including negative perceptions of psychology-related professionals, general lack of support from coaches and administrators, and difficulty fitting it into their demanding schedule (Mazzer & Rickwood, 2015; Watson, 2005). However, much of this research (Connole et al., 2014; Wilson et al., 2009; Zakrajsek et al., 2013) was collected using coaches, sport psychology consultants, and/or athletics administrators as participants.

Collegiate student-athletes represent a unique population of young adults. Distinct from their non-athlete peers, collegiate student-athletes must manage the challenges of college academics while maintaining a peak physical fitness level and the responsibilities associated with sports team membership (Neyer, 2001). Such strenuous demands put male and female collegiate student-athletes at potential risk for various mental health concerns (Sudano et al., 2017). According to data from the National College Health Assessment surveys, about 31% of male and 48% of female National Collegiate Athletic Association (NCAA) student-athletes reported either depression or anxiety symptoms each year of the 2008 and 2012 academic years (Brown et al., 2014). Evidence also shows that collegiate student-athletes are at risk for clinical or subclinical eating disorders

(Bratland-Sanda & Sundgot-Borgen, 2013; McLester et al., 2014), substance abuse (Barry et al., 2015), gambling addictions (Huang et al., 2010), sleep disturbances, mood disorders, and even suicide (Brown et al., 2014). To address the increasing concern regarding student-athletes' mental health, the Association for Applied Sports Psychology (AASP) and the NCAA Sports Science Institute both called for more research studies focused on improving collegiate student-athletes' mental health and overall well-being. In March 2016, the NCAA outlined Mental Health Best Practices that athletics departments must enact to raise awareness of mental health services availability, employ various types of mental health care providers, create referral systems, and utilize pre-participation mental health screenings (National Collegiate Athletic Association Sport Science Institute [NCAA SSI], 2016).

Collegiate student-athletes are often considered a vulnerable population because of the various demands placed upon them, such as balancing academics and athletics, performance pressures, and dealing with injury (Etzel et al., 2006; Hilliard et al., 2018). In a recent study, 63% of responding student-athletes reported that their mental health had impacted their performance in the month before completing the survey (Kern et al., 2017). Unfortunately, despite the apparent need, some researchers have argued that counseling services are still underutilized by collegiate student-athletes (Moreland et al., 2018). One of the reasons for this might be the social stigma associated with seeking mental health treatment (Yang et al., 2007). Stigma occurs when a certain need or behavior is accused or condemned as disgraceful due to societal and/or cultural opinions (Vogel et al., 2006). Relatedly, self-stigma occurs when an individual internalizes these

beliefs and allows them to diminish self-efficacy and, in turn, influence one's behavior (Vogel et al., 2006). Former studies revealed that self-stigma negatively predicted student-athletes' likeliness to seek mental health and sport psychology services both within the athletics department and through college counseling centers (Goodwin, 2017). Specifically, student-athletes with higher levels of self-stigma reported being unlikely to seek mental health services and perceived these services to be unhelpful in assisting with overall athletic performance. Conceivably, based on her study's findings, Goodwin (2017) found that student-athletes who experience forms of mental health distress may be less likely to seek help because of the stigma historically created by athletics departments. Stigma can affect the availability of societal resources, how people interact with each other, and how people think and feel (Cook et al., 2013). It is fundamentally a multilevel construct and one that is increasingly seen as a contributor to health disparities.

Barriers for Mental Health Care Providers

While the barriers for college students and student-athletes seeking mental health services are well-documented, there is little research discussing the barriers that might affect clinical services provided to student-athletes by mental health care providers on college campuses. Specifically, the literature is incomplete regarding the self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, attitudes toward the culture of athletics, and knowledge related to the culture of athletics, which impact the cultural responsiveness of mental health care providers on college campuses. Together, these variables that define cultural competency specific to athletics

may ultimately influence mental health care provision and, subsequently, improved mental health outcomes in the collegiate student-athlete population.

Researchers, college administrators, athletics departments, and policymakers are dedicating more time and resources to addressing the prevalence and care of collegiate student-athletes' mental health concerns (Galli et al., 2014; Moreland et al., 2018; Neal et al., 2013; Rao et al., 2015; Wolanin et al., 2015). Research suggests that athletics administrators are willing to hire sport psychology consultants to enhance collegiate student-athletes' on-field performance, as well as career and personal development (Connole et al., 2014). Athletics administrators' knowledge and personal preferences can directly impact the type of mental health care provider hired or contracted to counsel student-athletes (Wilson et al., 2009; Wrisberg et al., 2012). It is important to note that mental health services offered to collegiate student-athletes may be performed by a variety of professionals, including clinical sport psychologists, licensed clinical social workers, psychiatrists, psychiatric mental health nurses, licensed mental health counselors, mental skills trainers, mental resilience specialists, and even primary care physicians trained specifically to manage mental health disorders. Such professionals possess varied educational and training backgrounds and may provide highly individualized support and treatment or more generalized team support. For instance, clinical sport psychologists usually hold a doctoral degree accredited by the American Psychological Association (APA) and are trained to work with collegiate student-athletes on mental health-related concerns, including depression, anxiety, or substance abuse. On the other hand, sport psychology consultants often hold a master's degree, are certified in

sport psychology, and are trained to work with collegiate student-athletes on athletic performance-related issues (AASP, 2013; APA, 2013; NCAA SSI, 2016).

While the culture of most athletics departments may lean more heavily on performance as opposed to mental health, the NCAA has recognized the need for mental health services in recent years by providing specific recommendations for staffing of such individuals (NCAA SSI, 2016). Student-athletes in the Division I autonomy conferences are guaranteed access to mental health services and resources under legislation adopted unanimously by the Atlantic Coast, Big Ten, Big 12, Pac-12, and Southeastern conferences at the 2019 NCAA Convention (NCAA, 2019). The legislation requires all participating schools to make mental health services and resources available through the athletics department or the school's health services or counseling services department. However, for all other colleges, guaranteeing student-athletes access to mental health services is simply a recommendation.

It is not unreasonable to assume that collegiate student-athletes may report less stigma or perceive mental health services to be more helpful if they had regular access to such professionals within their athletics departments. Future research should be conducted to determine how these perceptions might differ compared to student-athletes from athletics departments with in-house sport psychology and mental health services. López and Levy (2013) revealed that student-athletes are rarely encouraged or advised to seek services that are not provided in-house. Conceivably, student-athletes with positive attitudes towards psychological professionals may still find themselves in an environment that does not support seeking sport psychology services. Such trends may be diminished

if student-athletes had regular access by hiring full-time mental health care providers or facilitating access to appropriate outside clinical services. In other words, the lack of in-house clinical mental health professionals who are culturally competent regarding athletics may create added and unnecessary barriers to seeking such services.

The Role of Cultural Competency in Counseling

While there is general consensus surrounding the importance of attending to cultural and diversity issues in psychotherapy, cultural competence definitions have been multifaceted (Chu et al., 2016; Whaley & Davis, 2007). At the core of all definitions is the idea that having skills and knowledge relevant to a client's cultural background is essential. A provider's cultural competence and sensitivity enhance the therapeutic process, contributing to positive therapeutic outcomes. However, differences exist regarding whether conceptualizations should emphasize the kind of person the therapist is (person level), the psychotherapeutic processes involved (process), or the skills or intervention tactics the therapist uses (S. Sue et al., 2009).

Because of past inadequacies in mental health care and mental health research with culturally diverse populations, the philosophy and practice of cultural competency have emerged. Cultural competency is one of the most exciting and challenging movements in the mental health field. It has been identified as being critical in promoting effective mental health care to all populations (President's New Freedom Commission on Mental Health, 2003; U.S. Department of Health and Human Services, 2001), and guidelines for cultural competency have been established by local governments, states, national organizations, and federal agencies (Center for Mental Health Services, 2000).

Additionally, the National Association of Social Workers (NASW) includes Leadership to Advance Cultural Competence as one of its 10 standards, which charge social workers with the ethical responsibility to be culturally competent (NASW, 2015).

In general, cultural competency guidelines have been based on the assumption that clinical mental health care providers should possess cultural knowledge and skills of a particular culture to deliver effective interventions to members of that culture. D. W. Sue et al. (1996) developed the most widely recognized conceptual framework in terms of the specific knowledge and skills required. Their conceptual scheme included three general areas: (a) Cultural awareness and beliefs: Provider's sensitivity to her or his personal values and biases and how these may influence perceptions of the client, the client's problem, and the counseling relationship; (b) Cultural knowledge: Counselor's knowledge of the client's culture, worldview, and expectations for the counseling relationship; and (c) Cultural skills: Counselor's ability to intervene in a manner that is culturally sensitive and relevant.

This framework has been adopted by the American Psychological Association's (2003) Multicultural Guidelines. However, the guidelines have been largely aspirational or hortatory in effect (e.g., emphasizing that therapists should consider the cultural background of clients), with less attention given to how cultural competence can be measured, conceptualized in terms of skills, implemented in practice, and trained in others. The most critical problem the cultural competency movement faces is progressing from a philosophical definition to a practice- or research-oriented one.

Furthermore, in discussing cultural competence, it is important to distinguish between levels of analysis. The first level, and the one that has received the most attention, is the provider level (S. Sue, 2006). The provider works one-on-one with clients, usually in a treatment or case management role. Interpersonal sensitivity, rapport-building, therapeutic alliance, and credibility are examined for cultural appropriateness and effectiveness. The second level occurs within an agency. Issues concerning organizational structure, hiring, the establishment of programs, evaluation, outreach, access and availability of service, utilization, costs and benefits, and quality of care are examined for their effectiveness for members of different cultural groups. Finally, the third level deals with systems of care within a community. The organization and structure of mental health services for different ethnic populations (e.g., health maintenance organizations, geographic areas served, and collaboration with community agencies, churches, schools, and law enforcement agencies) are of interest. Similarly, our study highlights the importance of establishing competencies at the provider, agency, and systems levels of mental health care, specific to the culture of collegiate athletics.

Critical Cultural Competencies in Collegiate Athletics

Cultural sport psychology (CSP) is a relatively new research genre that challenges mainstream sport psychology's assumptions to facilitate contextualized understandings of marginalized topics and cultural identities (Blodgett et al., 2014). CSP research can further explore student-athletes', consultants', and coaches' experiences using a critical cultural studies approach focusing on social difference, distribution of power, and social justice as interrelated concerns (Blodgett et al., 2014). Examples of topics in this genre

include exploring how sport psychology training privileges a particular gender, race, and social class or how particular narratives on sport identity categories (e.g., minority athlete, female athlete, lesbian athlete, athlete with disabilities) have implications for psychological experiences. Additionally, categories such as race, ethnicity, and gender may be explored in terms of how they create social justice issues between consultant and sport institution, consultant and athlete, coach and athlete, athlete and athlete, or researcher and research participant.

While CSP has proven helpful in understanding student-athletes' experiences, there remains a gap in the literature regarding cultural awareness of mental health care providers, specific to their work with student-athletes. Developed by Ajzen (1985), the Theory of Planned Behavior (TPB) is an explanatory model that has been widely applied in diverse studies on behavioral intention (Ajzen, 2012a; Ajzen, 2012b; Ajzen & Fishbein, 2005; Fraser et al., 2010; Lee et al., 2010; Yakasai & Jusoh, 2015). The TPB states that behavioral achievement depends on both motivation (intention) and ability. Then, it suggests that behavioral intention, in turn, is determined by five major determinants—attitude towards the behavior, subjective norms, social norms, perceived power, and perceived behavioral control. Although the Theory of Planned Behavior is a well-researched theory, it should be noted that there are several limitations of the TPB, including the assumption that the person had opportunities and acquired resources to be successful in performing the desired behavior, regardless of the intention. To explore the factors influencing clinical mental health care providers' intentions to provide culturally responsive care to collegiate student-athletes, we built a theoretical model based on the

Theory of Planned Behavior (TPB). Our research adapted the TPB by incorporating three variables (self-efficacy, empathy, and knowledge), and investigated how these variables influence individual's clinical care provision to collegiate student-athletes. This was the first time three variables were incorporated into the TPB to understand mental health care providers' behaviors to the best of our knowledge.

Like the TPB, our model suggests that behavioral achievement depends on motivation (intention) and ability. It comprises four variables that collectively represent a person's actual control over the behavior: self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes toward the culture of athletics, and knowledge related to the culture of athletics. The research model used in this study predicts mental health care providers' behavior by grafting the predictive model on the basis of our operationalization of the term 'cultural competency.' We suggest that cultural competency specific to athletics is comprised of (a) self-efficacy related to communicating with student-athletes; (b) empathy specific to student-athletes; (c) attitudes toward the culture of athletics; and (d) knowledge related to the culture of athletics. Our model predicts that mental health care providers with high levels of cultural competence will have higher intentions to be culturally responsive and ultimately provide clinical care that is culturally competent related to the culture of athletics.

What do Mental Health Care Providers Need to Know to Effectively Work with Student-Athletes?

Each year the number of students participating in intercollegiate athletics programs increases. According to the most recent statistics released by the National

Collegiate Athletic Association (NCAA, 2020), nearly half a million collegiate student-athletes make up the 19,886 teams that compete in 24 sports across three divisions. For the vast majority of these student-athletes, their participation in intercollegiate athletics is the fulfillment of a childhood dream. The experience will create for them fond memories and forge friendships that will last a lifetime. However, despite the many positive aspects of athletic participation, the collegiate student-athlete experience is not devoid of its challenges and struggles. For some student-athletes, the task of balancing the multiple demands of being both a student and an athlete may have deleterious effects on both their physical and mental health. As a result, a focus for support staff personnel working with student-athletes should be to adopt a holistic perspective to the services they provide.

Student-athletes are a population group with unique vulnerabilities whose mental health needs are often not met (Dean & Rowan, 2014). Still, to many people, the sports world is where none of the typical problems of American society could exist. Scholars have long examined issues specific to race and sports. Among these issues are racial discrimination in sports and the historically relevant observation that there are over-representations and under-representations of different races in different sports (Stanley & Yetman, 1977). Although Black Americans comprise only 13.4% of the American population, their extraordinary and highly visible success in athletics puts sports in a prominent position in American culture. However, though Black Americans experience high rates of participation and phenomenal success in highly visible sports such as basketball and football, there are many sports such as ice hockey, tennis, skiing, and swimming, where they are significantly underrepresented or virtually non-existent. There

are different theories for why this may be: some sports can be played on the street or vacant lot with no more equipment than a ball. Other sports, however, require access to a club or pool, and more specialized equipment is needed, making them less accessible. Sports such as golf or tennis often require more expensive memberships and even private lessons or coaching. Thus, "at all levels of sport, even across the most integrated sporting organizations, racial differences and inequities continue to be a defining feature of the American sporting landscape" (Hartmann, 2000, p. 235).

The relationship between race and sport is complicated. Because of sport's prominence in American culture, it has meaning and consequence far beyond the usual boundaries of the sporting world itself. Student-athletes of color experience life differently than those whose lives have not been devalued based on race, including a deeper mental health burden than their White teammates may face.

Mental health care providers are always advised to consider their multicultural awareness, skills, and knowledge. To become culturally competent specific to athletics, a mental health care provider should take stock of the culture, values, and biases they have and how they shape their view of student-athletes. Evaluating prejudices and preconceptions is an essential first step toward cultural competency. A mental health care provider must also seek knowledge. Knowledge is the key to becoming competent at anything, including cross-cultural interaction. Once a provider has evaluated their prejudices, they must learn about those who are different from them. Without knowledge, even a mental health care provider with the best intentions will regularly offend patients who are athletes. Finally, a provider must develop skills. A person with total self-

awareness and a veritable library of knowledge is not culturally competent without skills. Skills translate knowledge into action. A skilled mental health care provider uses their knowledge to develop strategies that allow them to interact successfully with collegiate student-athletes.

For a college counseling center to become culturally competent, its leaders must cultivate their cultural awareness, knowledge, and skills specific to student-athletes and the culture of athletics. A culturally competent mental health care provider will have a deep understanding of their cultural biases; they will commit to countering those biases at every turn. They will know how they are different from others and be comfortable with those differences. Moreover, a culturally competent provider will respect the differences they see in student-athletes and seek to learn from them. They will also understand the historical and current events that cause athletes to see the world differently. They will be aware of the past and present institutional barriers faced by collegiate student-athletes. With this knowledge, the mental health care provider will display successful communication skills and diffuse misunderstandings and tense situations quickly.

CHAPTER III

METHODOLOGY

The purpose of this study was to investigate the role of cultural competency in the provision of clinical mental health care to collegiate student-athletes. The primary goal of the study was to investigate whether demographic differences exist in a clinician's level of empathy, self-efficacy, knowledge, and attitudes toward treating student-athletes with mental health concerns. Further, we hoped to learn to what extent empathy, knowledge, self-efficacy, and attitudes are associated with a mental health care provider's intention to provide culturally competent clinical services to student-athletes who have mental health concerns. This chapter describes the design and procedures that were used to achieve the identified goals of this study.

Study Design

This study was a one-group survey design that targeted a convenience sample of licensed mental health care providers on college campuses.

Participants and Recruitment

Participants in this study were licensed, clinical mental health care providers who work on American college or university campuses. These clinicians were located in a variety of campus departments, including but not limited to: counseling centers, student health services, and athletics. This convenience sample was drawn from listservs of professional organizations, including Alliance of Social Workers in Sports; American

College Counseling Association; American Counseling Association; Big Sky Sport Psychology; and the Collegiate Counseling & Sport Psychology Association.

Following approval from the University of North Carolina at Greensboro Institutional Review Board for the Protection of Human Subjects, consent was obtained from each supporting professional organization to invite members to participate in the study. Participants were contacted via email a total of three times to take part in the study and complete the online questionnaire powered by Qualtrics (Provo, UT). Survey research collected using a web-based format has been found to yield differing response rates depending on such factors as the number of contacts, personalization of letter, survey length, question types, and the number of words per page (Liu & Wronski, 2017). To allow for easier access, greater reach to participants, more flexibility for participants to access the survey materials, and a greater likelihood of anonymity of participants (Dillman, 2007), potential participants were invited to complete the surveys online using a computer, tablet, or smartphone.

As outlined by Creswell (2012) and Dillman (2007), a step-by-step procedure was used to communicate with potential participants (see Appendix). First, an email was sent to all potential participants, including an introduction from the primary investigator, an explanation of the study, a description of incentive opportunity, and a survey link. A second email was sent 14 days later to remind prospective participants to complete the survey and thank those who had already done so. Finally, an email was sent to the same list, 28 days following the original communication thanking those who had completed the survey and reminding those who had not. The survey was open to participants for a total

of 30 days. Once clicking on the Qualtrics survey link embedded in recruitment emails, participants choosing to complete the web-based survey provided consent electronically.

After the survey, participants were thanked for participating in the study and provided with an opportunity to win one of 10, $50 Visa gift cards. To ensure that raffle participants' personal identifiers were not connected to their survey responses, a second Qualtrics link was created. Participants who chose to enter the raffle were instructed to click on the separate Qualtrics link and assured that their contact information would not be connected to their answers on the survey. Ten email addresses were randomly selected using an online raffle generator, and electronic gift cards were distributed via email. Funding for participation incentives was sponsored by UNC Greensboro Department of Public Health Education ($250.00) and UNC Greensboro School of Health and Human Sciences ($250.00). (Appendix)

Instrumentation

Content of Surveys

The survey was designed to obtain self-report measures of a participant's demographics, general self-efficacy, self-efficacy related to communicating with student-athletes, general empathy, empathy specific to student-athletes, attitudes toward the culture of athletics, knowledge related to the culture of athletics, and intentions to provide culturally responsive care to student-athletes (see Appendix A for survey variables).

Demographic Information

Participants were asked to provide personal information such as highest degree achieved; type of clinical license; affiliation with professional organizations; how many

years in clinical practice; which department(s) on campus they report to; and, percent of student-athletes on their caseload (see Appendix A). These items were adapted from previous measurements of health care providers' cultural competency specific to their population of interest (Marra et al., 2010; Schim et al., 2003).

Self-Efficacy

The items used to measure a participant's self-efficacy were adapted from the Self-Efficacy Formative Questionnaire (Erickson & Noonan, 2018) and the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995). The Self-Efficacy Formative Questionnaire was designed to measure a student's perceived level of proficiency in the two essential components of self-efficacy, which are the belief that ability can grow with effort; and the belief in an individual's own ability to meet specific goals and/or expectations. Individuals complete the questionnaire by self-rating items on a 5-point Likert-type scale, ranging from "*Not very like me*" to "*Very like me*." Participants with higher scores presumably have higher levels of self-efficacy. The General Self-Efficacy Scale (GSE) is a 10-item psychometric scale designed to assess optimistic self-beliefs to cope with various difficult demands in life. It explicitly refers to personal agency, i.e., the belief that one's actions are responsible for successful outcomes. Perceived self-efficacy is a prospective and operative construct. Items are self-rated on a Likert scale, ranging from "*Not at all true*" to "*Exactly true*." Again, higher participant scores indicate higher levels of self-efficacy.

For this study, the scale we designed to assess a participant's general self-efficacy adapted nine items from the Self-Efficacy Formative Questionnaire and the GSW.

Participants were asked how well each item described them as a licensed clinician, ranging from "*Not at all*" to "*Extremely well*." Six additional items were adapted to assess a mental health care provider's self-efficacy specific to student-athletes. They were answered on a 5-point Likert scale asking how well the statements describe them in their work with student-athletes, ranging from "*Not at all*" to "*Extremely well*." Higher scores were associated with higher levels of self-efficacy for the general scale and the athlete-specific scale.

Empathy

Items to measure a clinician's general empathy were adapted from the Interpersonal Reactivity Index (Davis, 1980) and the Toronto Empathy Questionnaire (Spreng et al., 2009). The Interpersonal Reactivity Index (IRI) defines empathy as the reactions of one individual to the observed experiences of another (Davis, 1980). Twenty-eight items are answered on a 5-point Likert scale ranging from "*Does not describe me well*" to "*Describes me very well*." Sixteen items are answered on a 5-point Likert scale ranging from "*Never*" to "*Always*." The Toronto Empathy Questionnaire (TEQ) represents empathy as a primarily emotional process. In previous studies, the TEQ demonstrated strong convergent validity and correlated positively with behavioral measures of social decoding. Moreover, it exhibited good internal consistency and high test-retest reliability.

For this study, nine items that measure empathy were adapted from the IRI and TEQ. They were answered on a 5-point Likert scale assessing how often the statements were true for the participants, ranging from "*Rarely*" to "*Almost always*." High scores

indicated higher levels of participant empathy. Dillman (2007) recommends a respondent-friendly questionnaire design. Eliminating "*never*" and "*always*" as options made the response task easier for the respondent to complete. A second scale was designed to measure a participant's empathy specific to student-athletes, using a similar adaptation of the IRI and TEQ. Following Dillman (2007), this athlete-specific scale included six items measured on a 5-point Likert scale ranging from "*Rarely*" to "*Almost always*."

Attitudes

Items to measure a participant's attitudes toward student-athletes were adapted from the Sport Attitude Survey (Yakut et al., 2016), and the Positive Thinking Scale (Diener et al., 2009). The Sport Attitude Survey (SAS) was created to measure important sub-areas in sport beliefs and attitudes, including a participant's belief that sport participation builds character, enhances health, should support diversity, and is important to early education. The scale includes 75 items measured on a 4-point Likert scale ranging from "*Strongly disagree*" to "*Strongly agree*." Higher scores suggest more positive attitudes. The Positive Thinking Scale (PTS) has 22 yes/no items with an equal number of positive and negative items. The measure is used to assess a person's positive versus negative thinking about important aspects of their lives.

For this study, seven items were adapted from the SAS and PTS to measure a participant's attitudes toward the culture of athletics. They were answered on a 5-point Likert scale asking participants to indicate how much they agree or disagree with each

statement, ranging from "*Strongly disagree*" to "*Strongly agree*." Based on the scales from which our tool was adapted, higher scores indicate more positive attitudes.

Knowledge

Knowledge surveys provide a means to assess changes in specific content learning and intellectual development (Nuhfer, 2003). However, these surveys can serve as both formative and summative assessment tools. For this study, knowledge questions captured baseline knowledge to measure the extent to which participants have stored factual information in long-term memory and how well they can retrieve and respond with that information when asked a question about the culture of athletics. Items were designed based on the core constructs of the updated NCAA Stakeholders Guide (see Appendix A), including: care coordination; alcohol and substance use; body image and disordered eating; anxiety; depression; sleep disorders; physical injury; and NCAA policies. These items were scored as "0" for incorrect responses, and "1" for correct responses. Thus, a participant with a higher score exhibited higher levels of knowledge about the culture of athletics.

Intentions

Items to measure a participant's intentions to provide culturally responsive care to student-athletes were adapted from the Clinical Cultural Competency Questionnaire (Like, 2011). Originally designed as 24 items to determine skills and levels of comfort, our survey presented participants with five items to be answered on a 5-point Likert scale asking participants how likely they were to do each, ranging from "*Extremely unlikely*" to

"*Extremely likely*." Participants with higher scores were more likely to intentionally provide culturally responsive care to student-athletes.

Measures

All scales used in this study were reliable. The General Empathy Scale, adapted from the Interpersonal Reactivity Index (Davis, 1980) and Toronto Empathy Questionnaire (Spreng et al., 2009), shows lower reliability than the other scales but is still within an acceptable range (.67). Overall, however, Cronbach's Alpha tests suggest that these are stable and reliable scales on which to base data results. Knowledge is a summed score, and therefore reliability is not reported (see Table 1).

Table 1

Descriptive Information for all Key Control and Study Variables (Self-Efficacy General; Self-Efficacy Student-Athletes; Empathy General; Empathy Student-Athletes; Attitudes; Knowledge; Intentions)

Variable	Mean	Standard Deviation	Min/Max	Skewness	Cronbach's Alpha
SE general	4.13	.48	2.44/5.00	-.55	.83
SE student-athletes	3.94	.65	1.00/5.00	-1.28	.90
Empathy general	4.32	.41	3.22/5.00	-.43	.67
Empathy student-athletes	4.02	.61	2.17/5.00	-1.05	.76
Attitudes	3.63	.49	2.43/5.00	-.15	.72
Knowledge	3.70	1.28	.00/7.00	-.11	
Intentions	4.29	.63	1.00/5.00	-1.74	.76

Note. SE general = Self-efficacy general; SE student-athletes = Self-Efficacy specific to student-athletes; Empathy student-athletes = Empathy for student-athletes; Intentions = Intentions to provide culturally responsive clinical care to student-athletes.

Data Analysis

Two hundred sixteen surveys were collected, but data from 153 were included in the final analyses. Demographic data were summarized descriptively, using SPSS software, version 24.0 (IMB Corporation, Armonk, NY, USA). Frequencies and percentages were calculated on all demographic items (see Table 2 later in this chapter). Descriptive statistics were compiled to provide a summary of the sample and normality of the data. To test the reliability and validity of the scales, internal consistency was assessed by calculating the scales' Cronbach's alpha (see Table 1).

RQ1: Are there demographic differences that impact a clinical mental health care provider's self-efficacy, empathy, attitudes, and knowledge toward treating collegiate student-athletes with mental health concerns?

To examine Research Question 1, a multiple linear regression was conducted to assess if demographic variables predict the level of cultural competency, which has been defined by our measures of self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes toward the culture of athletics, and knowledge related to the culture of athletics. First, we predicted each outcome variable based on individual demographic variables to determine their relationships to one another. Secondly, we entered all predictors simultaneously into the model to determine whether there was a significant difference in each outcome after controlling for the other demographic variables.

RQ2: To what extent are self-efficacy, empathy, attitudes, and knowledge associated with a clinical mental health care provider's intention to provide culturally competent clinical care to collegiate student-athletes?

The model was tested based on the outcome measure of intention to provide clinical care to student-athletes that is culturally competent related to the culture of athletics. This was accomplished using multiple linear regression, with each of the four cultural competency variables as separate predictors of intentions. In model 1, we controlled for demographic information about the participant (e.g., gender, race, number of years working in the college setting, whether participant played college/pro sport, and type of clinical license). In model 2, we added sport-related professional factors to our control variables (e.g., percentage of student-athletes on caseload, whether they work at an NCAA member institution, if they received cultural competency training specific to student-athletes if they belong to a sport-related professional organization). Finally, in model 3, we added the study's four outcome variables (e.g., self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes toward the culture of athletics, and knowledge related to the culture of athletics).

Participants

Eighty-four percent of the participants identified as female, and 12% as male. The vast majority was White (81%). Just less than three-fourths (73%) were Master's level mental health care providers, with the remaining 27% having doctoral degrees. More than one-half of the participants (54%) were Licensed Professional Counselors, followed by Licensed Clinical Social Workers (18%), Clinical Psychologists (18%), and providers

who have various other clinical licenses, including Marriage & Family Therapists and Licensed Substance Abuse Counselors (16%). More than half of the participants were aligned with the Counseling Center on their campus (58%), and 6% were aligned with the Athletics Department. Other alignments included Student Life (31%), Student Health Services (12%), Student Affairs (10%), and Academic Departments (4%). Only 11% of participants played intercollegiate or professional sports. Participants had provided clinical mental health services on college campuses for an average of 8 years. And, participants reported an average of 18% of their caseload was made up of student-athletes. See Table 2 for demographic results.

Table 2

Sample Demographics Results (N = 153)

Characteristic	*n* (%)	Min	Max	*M* (*SD*)
Gender				
Female	129 (84.3)			
Male	19 (12.4)			
Other	5 (3.3)			
Race/Ethnicity				
Asian	6 (3.9)			
Black or African American	8 (5.2)			
Hispanic/Latino	5 (3.3)			
White	124 (81.0)			
Multiracial	5 (3.3)			
Other	2 (1.3)			
Highest Level of Education				
Master's Degree	112 (73.2)			
Doctoral	41 (26.8)			

Table 2

Cont.

Characteristic	*n* (%)	Min	Max	*M* (*SD*)
Type of Clinical Licensure				
Licensed Professional Counselor	82 (53.6)			
Licensed Clinical Social Worker	28 (18.3)			
Clinical Psychologist	27 (17.6)			
Psychiatrist	0 (0.0)			
Other	24 (15.7)			
Alignment on Campus *Select all that apply*				
Academic Department	6 (3.9)			
Athletics Department	10 (6.4)			
Counseling Center	89 (58.2)			
Student Health Services	19 (12.4)			
Student Life	48 (31.4)			
Student Affairs	15 (9.8)			
Other	18 (11.8)			
Sport Organization Membership				
No	136 (88.9)			
Yes	17 (11.1)			
Cultural Awareness Training				
No	40 (26.1)			
Yes	113 (73.9)			
Cultural Awareness Training—Student-Athletes				
No	96 (62.7)			
Yes	57 (37.3)			

Table 2

Cont.

Characteristic	*n* (%)	Min	Max	*M* (*SD*)
School Association/Division				
NCAA Division I	47 (30.7)			
NCAA Division II	14 (9.2)			
NCAA Division III	29 (19.0)			
NAIA	11 (7.2)			
NJCAA	9 (5.9)			
NCCAA	1 (0.7)			
Other	16 (10.5)			
Did participant play college/pro sport?				
No	136 (88.9)			
Yes	17 (11.1)			
Number of years practicing in any setting		0.0	35.0	12.1 (8.5)
Number of years practicing in college setting		0.0	31.0	8.0 (6.8)
% Student-Athletes on Caseload		0.0	100.0	18.3 (26.9)

Results

Associations of Demographic Variables

Bivariate analysis explored the associations of demographic variables, using $p = 0.05$ as the significance level to partially compensate for multiplicity. There was a positive correlation between the percent of caseload comprised of student-athletes and self-efficacy specific to student-athletes. The number of years participants had practiced in any setting was highly correlated ($p = .00$) with the number of years participants had practiced in a college setting. Participants' general self-efficacy was highly correlated to

their self-efficacy specific to student-athletes; similarly, participants' general level of empathy was highly correlated to their empathy specific to student-athletes. Participant knowledge was only related to the percent of student-athletes on their caseload. See Table 3.

Table 3

Correlations for all Dependent Variables and Numeric Variables of Interest (N = 153)

	1	2	3	4	5	6	7	8	9
1. % SA caseload									
2. Years in any setting	.00								
3. Years in college setting	-.05	.79**							
4. SE general	.10	.28**	.18*						
5. SE student-athletes	.30**	.34**	.24**	.71**					
6. Empathy general	.33	.09	.06	.28**	.21*				
7. Empathy SA	.33**	.19*	.12	.27**	.46**	.33**			
8. Attitudes	.27**	.19*	.14	.16	.30**	.08	.38**		
9. Knowledge	.18*	.01	.11	-.00	.07	.15	.06	.05	
10. Intentions	.28**	.14	.01	.34**	.43**	.18*	47**	.30**	.01

Note: % caseload SA = Percent of caseload that is student-athletes; Years in any setting = Number of years in clinical practice in any setting; Years in college setting = Number of years in clinical practice in a college setting; SE general = Self-Efficacy general; SE student-athletes = Self-Efficacy specific to student-athletes; Empathy SA = Empathy for student-athletes; Intentions = Intentions to provide culturally responsive clinical care to student-athletes.
*$p < .05$; **$p < .01$.

Independent Samples *t*-tests (Compares Two Groups)

Gender Differences

An independent samples *t*-test was conducted to examine the differences in outcome variables among male and female mental health care providers. There were significant differences between men and women on ratings of general empathy, t (146) =

-1.86, p = .07. Overall, women had higher ratings of general empathy (M = 4.34, SD = .40) than men (M = 4.16, SD = .42).

Race Differences

An independent samples *t*-test was conducted to examine the differences in outcome variables among mental health care providers who identify as White and those who did not. There were significant differences in attitude, such that White providers had more positive attitudes toward the culture of athletics (M = 3.67, SD = .48) than non-Whites (M = 3.41, SD = .51), t (148) = -2.57, p = .02.

Master's Degree vs. Doctoral

An independent samples *t*-test was conducted to examine the differences in outcome variables among mental health care providers whose highest academic degree was at the Master's level and providers whose highest academic degree was at the Doctoral level. There were significant differences in knowledge total, t (125) = 2.39, p = .02. Master's level providers had less knowledge related to the culture of athletics (M = 3.55, SD = 1.25) than providers with Doctoral degrees (M = 4.10, SD = 1.23).

NCAA Member Institutions vs. Other Athletic Affiliation

An independent samples *t*-test was conducted to examine the differences in outcome variables among mental health care providers who worked at an NCAA member institution and those who did not. There were significant differences in self-efficacy specific to student-athletes, t (125) = -2.54, p = .01. Overall, providers who worked at NCAA member institutions had higher levels of self-efficacy related to communicating

with student-athletes (*M* = 4.10, *SD* = .58) than providers who did not work for an NCAA member institution (*M* = 3.73, *SD* = .81).

There were also significant differences in empathy specific to student-athletes *t* (124) = -2.81, *p* = .01. Providers who worked at NCAA member institutions had higher levels of empathy specific to student-athletes (*M* = 4.11, *SD* = .55) than providers who did not work for an NCAA institution (*M* = 3.78, *SD* = .72).

Differences in general empathy were also significant between providers who worked at NCAA member institutions and providers who did not *t* (124) = -2.03, *p* = .04. Overall, mental health care providers who worked at NCAA member institutions had higher levels of general empathy (*M* = 4.36, *SD* = .41) than those who did not (*M* = 4.20, *SD* = .40).

There were also significant differences in knowledge *t* (125) = -2.95, *p* = .00. Mental health care providers who worked at NCAA member institutions had higher levels of knowledge related the culture of athletics (*M* = 3.86, *SD* = 1.23) than providers who did not (*M* = 3.14, *SD* = 1.29).

Finally, there were significant differences in the percentage of caseload made up by student-athletes *t* (122) = -2.74, *p* = .01. Providers who worked at NCAA member institutions averaged a higher percentage of student-athletes on their caseload (*M* = 24.83, *SD* = 30.40), than those who did not work at NCAA member institutions (*M* = 11.65, *SD* = 21.56).

Membership to a Sports-Related Professional Organization

An independent samples *t*-test was conducted to examine the differences in outcome variables among mental health care providers who belonged to sports-related professional organizations and those who did not. There were significant differences in general self-efficacy, t (151) = -2.68, p = .01. Providers who belonged to sport-related professional organizations had higher levels of general self-efficacy (M = 4.42, SD = .38) than providers who did not (M = 4.09, SD = .48).

There were also significant differences in self-efficacy specific to student-athletes, t (151) = -3.33, p = .00. Overall, providers who belonged to sport-related professional organizations had higher levels of self-efficacy related to communicating with student-athletes (M = 4.42, SD = .41) than those who did not (M = 3.88, SD = .65).

Significant differences were also found in empathy specific to student-athletes, t (149) = -3.03, p = .00. Overall, providers who belonged to sport-related professional organizations had higher levels of empathy specific to student-athletes (M = 4.43, SD = .49) than those who did not (M = 3.97, SD = .61).

There were significant differences in intention to provide culturally responsive care to student-athletes, t (151) = -2.98, p = .00. Overall, mental health care providers who belonged to sport-related professional organizations had higher levels of intention to provide culturally responsive care to student-athletes (M = 4.71, SD = .35) than those who did not (M = 4.23, SD = .64).

Significant differences were also present in attitude, t (151) = -2.25, p = .03. Overall, providers who belonged to sport-related professional organizations had more

positive attitudes toward the culture of athletics (M = 3.87, SD = .46) than those who did not (M = 3.59, SD = .49).

Finally, there were significant differences in knowledge, t (150) = -2.92, p = .00. Overall, mental health care providers who belonged to a sports-related professional organization demonstrated higher levels of knowledge related to the culture of athletics (M = 4.52, SD = 1.07) than providers who did not (M = 3.59, SD = 1.27).

Cultural Competency Training Related to Student-Athletes

An independent samples t-test was conducted to examine the differences in outcome variables among mental health care providers who received cultural competency training specific to student-athletes and those who had not. There were significant differences in general self-efficacy, t (151) = -2.04, p = .04. Overall, providers who received cultural competency training specific to student-athletes had higher levels of general self-efficacy (M = 4.18, SD = .47) than providers who did not (M = 4.00, SD = .50).

One-Way ANOVA

Type of Clinical License (LPC, LCSW, Psychology)

There were significant differences in ratings of general self-efficacy based on the type of clinical license of the participant, F (2,135) = 4.52, p = .01. Licensed Clinical Social Workers (LCSWs) had the highest rating of general self-efficacy (M = 4.36, SD = .44), followed by Licensed Professional Counselors (LPCs) (M = 4.10, SD = .45), and Psychologists (M = 4.02, SD = .44). Post hoc LSD analyses revealed significant differences between LCSW and both LPC (p = .01), and Psychologists (p = .01).

There were also significant differences in ratings of general empathy based on the type of clinical license of the participant, F (2,133) = 3.06, p = .05. LPCs had the highest rating of general empathy (M = 4.37, SD = .38), followed by LCSWs (M = 4.24, SD = .36), and Psychologists (M = 4.17, SD = .48). Post hoc LSD analyses revealed significant differences between LPC and Psychologists (p = .03).

Additionally, there were significant differences in knowledge, F (2.135) = 6.40, p = .00. Psychologists had the highest level of knowledge related to the culture of athletics (M = 4.44, SD = 1.28), followed by LPCs (M = 3.48, SD = 1.29), and LCSWs (M = 3.46, SD = 1.14). Post hoc LSD analyses revealed significant differences between Psychologists and both LPCs (p = .00), and LCSWs (p = .01).

Multiple Regression

Model 1

Multiple regression analyses were conducted to examine the relationships between intention to provide culturally responsive care to student-athletes and various predictors. Table 4 summarizes the descriptive statistics and analysis results for Model 1. For the first model, the regression analyses were run to examine the relationship with demographic variables of gender, race, number of years practicing in a college setting, history of sport participation, and type of clinical license.

As can be seen in Table 4, intentions were not significantly correlated with the criterion. The multiple regression model with these four predictors produced R^2 = .04, F(5,101) = .79, p = .56.

Model 2

Multiple regression analyses were conducted to examine the relationship between intention to provide culturally responsive care to student-athletes and various potential predictors. Table 4 summarizes the descriptive statistics and analysis results for Model 2. For the second model, the regression analyses were run to examine the relationship with basic demographic variables (gender; race; number of years practicing in a college setting; history of sport participation; and type of clinical license), as well as professional factors (percentage of student-athletes on caseload; if they worked at an NCAA member institution; if they received cultural competency training specific to student-athletes; and, if they belonged to a sport-related professional organization).

As can be seen in Table 4, intentions were not significantly correlated with the criterion. The multiple regression model with these additional predictors produced R^2 = .12, $F(9,97) = 1.53$, $p = .15$. When adding the additional criterion in model 2, R^2 changed .87.

Model 3

Multiple regression analyses were conducted to examine the relationship between intention to provide culturally responsive care to student-athletes and various potential predictors. Table 4 summarizes the descriptive statistics and analysis results for model 3. For the third model, the regression analyses were run to examine the relationship with basic demographic variables (gender; race; number of years practicing in a college setting; history of sport participation; and type of clinical license), as well as professional factors (percentage of student-athletes on caseload; if they worked at an NCAA member

institution; if they received cultural competency training specific to student-athletes; and, if they belonged to a sport-related professional organization), and outcome variables (self-efficacy related to communicating with student-athletes; empathy specific to student-athletes; positive attitudes toward the culture of athletics; and, knowledge related to the culture of athletics).

As can be seen in Table 4, receiving cultural competency training related to student-athletes, self-efficacy related to communicating with student-athletes, and empathy specific to student-athletes items had significant positive regression weights, indicating mental health care providers with these characteristics were expected to have higher intention to provide culturally competent clinical care to student-athletes, after controlling for the other variables in the model. The multiple regression model with these additional predictors produced $R^2 = .45$, $F(13,93) = 5.82$, $p = .00$. When adding the additional criterion in model 3, R^2 changed .33.

Overall, when providers received cultural competency training related to student-athletes, their intentions increased .25. Every one-point increase in a provider's score for self-efficacy related to communicating with student-athletes results in a .30 increase in intention to provide culturally responsive clinical care to student-athletes. Every one-point increase in a provider's score for empathy specific to student-athletes results in a .37 increase in intention to provide culturally responsive clinical care to student-athletes.

Table 4

Summary Statistics, Correlations, and Results from the Regression Analysis

	Model 1		Model 2		Model 3	
	Standardized Beta	*p*	Standardized Beta	*p*	Standardized Beta	*p*
(Constant)		.00		.00		.09
Female	.12	.24	.09	.36	.04	.62
White	.06	.53	.01	.91	-.04	.62
Number of years in college setting	-.01	.94	-.02	.84	-.11	.21
Did participant play college/pro sport	.13	.18	-.04	.73	-.05	.64
Type of clinical license	.09	.38	.02	.87	.10	.27
Percentage student-athletes on caseload			.24	.10	.10	.42
NCAA			.06	.57	-.07	.46
Received CC training			.18	.08	.25	.00*
Sport organization membership			.08	.58	.00	.98
Self-Efficacy specific to student-athletes					.30	.00**
Empathy specific to student-athletes					.37	.00**
Attitude					.12	.16
Knowledge					-.08	.38
R^2	.04		.12		.45	

Note. Dependent Variable: Intention. $^{*}p < .05$; $^{**}p < .01$.

CHAPTER IV

LINK BETWEEN DEMOGRAPHIC CHARACTERISTICS AND CULTURAL COMPETENCY

A descriptive analysis of demographic characteristics and their association with mental health care providers' cultural competency related to the culture of athletics.

Abstract

Mental health care providers' cultural competency related to athletics is crucial to their clinical care provision for student-athletes. The purpose of this study was to analyze selected demographic characteristics of mental health care providers who work on college or university campuses to determine if statistically significant differences were present when assessing their level of cultural competency specific to care provision for collegiate student-athletes. The study defined cultural competency by our measures of self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes toward the culture of athletics, and knowledge related to the culture of athletics. First, we predicted each outcome variable (e.g., self-efficacy, empathy, attitudes, knowledge) based on individual demographic variables. Specifically, we tested whether gender, race, highest level of education, type of clinical license, departmental affiliation on campus, sport organization membership, cultural awareness training, NCAA affiliation, history of playing college or professional sports, number of years practicing in the college setting, and percentage of student-athletes on caseload

were associated with each outcome. Secondly, we entered all predictors simultaneously into the model to determine whether there was a significant relationship with each outcome after controlling for the other demographic variables. Data were collected using an online survey method and analyzed using structural equation modeling and multiple regression. The percentage of student-athletes on a mental health care provider's caseload was the greatest predictor of the provider's self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, attitudes toward the culture of athletics, and intention to provide culturally responsive care to student-athletes. The results implicate the need for professional development specific to this student population, and suggestions for further research are discussed.

Introduction

According to The National Collegiate Athletic Association (NCAA) there are over 494,000 student-athletes who compete in sanctioned athletics nationwide (NCAA, 2020). While intercollegiate athletics provide a unique opportunity allowing young adults to explore athletic and academic pursuits, many student-athletes find this experience challenging and struggle with the cultural demands of a rigorous mental and physical environment (Childers, 2019; Etzel et al., 2002). In recent years, the NCAA has openly recognized that mental health concerns are serious in intercollegiate athletics. Along with new regulations, the NCAA has, and continues to raise awareness of collegiate student-athletes' mental health needs, requiring member NCAA institutions to create and implement mental health protocols that include access and/or referral to licensed mental health professionals (Klenck, 2014; NCAA SSI, 2016; Way et al., 2019). Researchers and

sport psychology professionals have long called for in-house mental health services within intercollegiate athletics (Connole et al., 2014; Hack, 2007; López & Levy, 2013). However, when mental health services are not provided "in-house" student-athletes may encounter barriers to seeking services independently. For example, a collegiate student-athlete may feel misunderstood and less likely to develop a relationship with a mental health professional who has little-to-no background or understanding of sports or collegiate athletics (Hack, 2007). Additionally, most university counseling centers operate during normal business hours, often coinciding with classes, practice, and competition schedules, making it difficult for student-athletes to attend counseling sessions (López & Levy, 2013). It is also common for campus counseling centers to become overbooked and restrict students to a fixed number of sessions, making it even more challenging to meet student-athletes' needs in a timely manner (Gill, 2008; Goodwin, 2017). Thus, professionals trained and knowledgeable in working with this population can make a case for providing student-athletes with more accessible mental health services.

Research has explored athletic directors' and coaches' perceptions and preferences in regards to sport psychology professionals. However, there is no existing literature that explores clinical mental health care providers' self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes toward the culture of athletics, and knowledge related to the culture of athletics.

Purpose

The purpose of this study was to identify demographic characteristics of mental health care providers who work on college or university campuses that are associated with providing culturally competent care to collegiate student-athletes. Ten specific characteristics were analyzed: gender, race, highest level of education, type of clinical license, alignment on campus, sport organization membership, cultural awareness training, NCAA affiliation, history of playing college or professional sports, number of years practicing in a college setting, and percentage of student-athletes on caseload). By learning more about the characteristics of mental health care providers on college campuses, counseling center directors and other university administrators will be better equipped to make informed programming decisions.

Research Question

Are there demographic differences that impact a clinical mental health care provider's self-efficacy, empathy, attitudes, and knowledge toward treating collegiate student-athletes with mental health concerns?

Data and Research Methodology

Participants and Recruitment

Participants in this study were licensed, clinical mental health care providers who worked on American college or university campuses. This convenience sample was drawn from listservs shared by professional organizations, including Alliance of Social Workers in Sports; American College Counseling Association; American Counseling Association; Big Sky Sport Psychology; and the Collegiate Counseling & Sport

Psychology Association. Following approval from the University of North Carolina at Greensboro Institutional Review Board, the study's primary investigator (PI) contacted participants three times to take part in the study and complete the online questionnaire powered by Qualtrics (Provo, UT). First, the PI sent an email to all potential participants, including a personal introduction, an explanation of the study, a description of the incentive opportunity, and a survey link. The PI sent a second email 14 days later to remind prospective participants to complete the survey and thank those who had already done so. Finally, the PI sent an email to the same list, 28 days following the original communication thanking those who had completed the survey and reminding those who had not. The survey was open to participants for a total of 30 days. Once clicking on the Qualtrics survey link embedded in recruitment emails, participants choosing to complete the web-based survey provided consent electronically. After the survey, participants could choose to enter a raffle to win one of 10, $50 Visa gift cards by clicking on a separate Qualtrics link that was not linked to their survey answers.

Instrumentation

Demographic Information

Participants indicated their highest degree achieved; type of clinical license; affiliation with professional organizations; how many years in clinical practice; which department(s) on campus they aligned with; and percentage of student-athletes on their caseload (Table 5). These items were adapted from previous measurements of health care providers' cultural competency specific to their population of interest (Marra et al., 2010; Schim et al., 2003). With the exception of types of clinical licenses, binary variables were

created for each predictor to compare participants who identified as one or another. For example, female was a binary variable created to compare participants who identified as male or female.

Table 5

Survey Variables

Variable	Description	Scale
Demographics	Participants were asked to provide personal information such as highest degree achieved; type of clinical license; affiliation with professional organizations; how many years in clinical practice; which department(s) on campus they report to; and, percent of student-athletes on their caseload	These items were adapted from previous measurements of health care providers' cultural competency specific to their population of interest (Marra et al., 2010; Schim et al., 2003).
Empathy General	Items to measure a clinician's general empathy were adapted from the Interpersonal Reactivity Index (Davis, 1980) and the Toronto Empathy Questionnaire (Spreng et al., 2009).	Sixteen items were answered on a 5-point Likert scale assessing how often the statements were true for the participants, ranging from "Rarely" to "Almost always." High scores indicated higher levels of participant empathy.
Empathy specific to student-athletes	For this study, nine items that measure empathy were adapted from the IRI and TEQ. A second scale was designed to measure a participant's empathy specific to student-athletes, using a similar adaptation of the IRI and TEQ.	This athlete-specific scale included six items measured on a 5-point Likert scale ranging from "Rarely to "Almost always." High scores indicated higher levels of participant empathy specific to student-athletes.
Self-efficacy General	The items used to measure a participant's self-efficacy were adapted from the Self-Efficacy Formative Questionnaire (Erickson & Noonan, 2018) and the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995).	For this study, the scale we designed to assess a participant's general self-efficacy adapted nine items from the Self-Efficacy Formative Questionnaire and the GSW. Participants were asked how well each item described them as a licensed clinician, ranging from "Not at all" to "Extremely well." Higher scores indicated higher levels of general Self-Efficacy.

Table 5

Cont.

Variable	Description	Scale
Self-efficacy specific to student-athletes	Six additional items were adapted to assess a mental health care provider's self-efficacy specific to student-athletes.	These items were answered on a 5-point Likert scale asking how well the statements describe them in their work with student-athletes, ranging from "Not at all" to "Extremely well." Higher scores were associated with higher levels of self-efficacy specific to student-athletes.
Knowledge	For this study, knowledge questions captured baseline knowledge to measure the extent to which participants have stored factual information in long-term memory and how well they can retrieve and respond with that information when asked a question about the culture of athletics. Items scored the participants' knowledge about care coordination; alcohol and substance use; body image and disordered eating; anxiety; depression; sleep disorders; physical injury and NCAA policies.	These items were scored as "0" for incorrect responses, and "1" for correct responses. Thus, a participant with a higher score exhibited higher levels of knowledge about the culture of athletics.
Attitudes	Items to measure a participant's attitudes toward student-athletes were adapted from the Sport Attitude Survey (Yakut et al., 2016), and the Positive Thinking Scale (Diener et al., 2009). For this study, seven items were adapted from the SAS and PTS to measure a participant's attitudes toward the culture of athletics.	They were answered on a 5-point Likert scale asking participants to indicate how much they agree or disagree with each statement, ranging from "Strongly disagree" to "Strongly agree." Based on the scales from which our tool was adapted, higher scores indicate more positive attitudes.
Intentions	Items to measure a participant's intentions to provide culturally responsive care to student-athletes were adapted from the Clinical Cultural Competency Questionnaire (Like, 2011).	Our survey presented participants with five items to be answered on a 5-point Likert scale asking participants how likely they are to do each, ranging from "Extremely unlikely" to "Extremely likely." Participants with higher scores were more likely to intentionally provide culturally responsive care to student-athletes.

Self-Efficacy

We used two measures of self-efficacy (Table 5). To measure *general self-efficacy*, we adapted nine items from the Self-Efficacy Formative Questionnaire (SFQ Erickson & Noonan, 2018) and the General Self-Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995). The SFQ was written for teaching professionals, so items related specifically to the classroom were removed, and other items were adapted to represent student-athletes rather than students in academic settings. The GSW was adapted by removing items that were about personal self-efficacy, and adapting items about external influence, making them specific to the culture of sports. Participants indicated how well each item described them as a licensed mental health care provider, ranging from X = "*Not at all*" to Y = "*Extremely well*." To measure *self-efficacy related to communicating with student-athletes*, we adapted six items from the SFQ and the GSE. Participants indicated how well each statement described them in their work with student-athletes, from 1 = "*Not at all*" to 5 = "*Extremely well*." Higher scores were associated with higher levels of self-efficacy.

Empathy

Items to measure a clinician's general empathy (Table 5) were adapted from the Interpersonal Reactivity Index (Davis, 1980) and the Toronto Empathy Questionnaire (Spreng et al., 2009). The Interpersonal Reactivity Index (IRI) defines empathy as the reactions of one individual to the observed experiences of another (Davis, 1980). Participants answered 28 items on a 5-point Likert scale ranging from "*Does not describe me well*" to "*Describes me very well*." The Toronto Empathy Questionnaire (TEQ)

represents empathy as a primarily emotional process. In previous studies, the TEQ demonstrated strong convergent validity and correlated positively with behavioral measures of social decoding.

For this study, nine items that measure empathy were adapted from the IRI and TEQ. Our adaptation of both of these scales eliminated items that were very specific to certain life events, including only the items that participants could apply in their clinical practice with student-athletes. They were answered on a 5-point Likert scale assessing how often the statements were true for the participants, ranging from "*Rarely*" to "*Almost always*." High scores indicated higher levels of participant empathy. A second scale was designed to measure a participant's empathy specific to student-athletes, using a similar adaptation of the IRI and TEQ. Following Dillman (2007), this athlete-specific scale included six items measured on a 5-point Likert scale ranging from "*Rarely*" to "*Almost always*."

Attitudes

Items to measure a participant's positive attitudes toward the culture of athletics (Table 5) were adapted from the Sport Attitude Survey (Yakut et al., 2016), and the Positive Thinking Scale (Diener et al., 2009). The Sport Attitude Survey (SAS) was created to measure important sub-areas in sport beliefs and attitudes, including a participant's belief that sport participation builds character, enhances health, should support diversity, and is important to early education. The scale includes 75 items measured on a 4-point Likert scale ranging from "*Strongly disagree*" to "*Strongly agree*." Higher scores suggest more positive attitudes. The Positive Thinking Scale (PTS) has 22

yes/no items with an equal number of positive and negative items. The measure is used to assess a person's positive versus negative thinking about important aspects of their lives.

For this study, seven items were adapted from the SAS and PTS to measure a participant's attitudes toward the culture of athletics. Items we included were initially written for general application about athletes in society, so we adapted them to be more relevant to the participants' attitudes toward collegiate student-athletes and the culture of athletics. They were answered on a 5-point Likert scale asking participants to indicate how much they agreed or disagreed with each statement, ranging from "*Strongly disagree*" to "*Strongly agree*." Based on the scales from which our tool was adapted, higher scores indicated more positive attitudes.

Knowledge

Knowledge items (Table 5) were based on elements of various educational initiatives related to collegiate athletics, including care coordination; alcohol and substance use; body image and disordered eating; anxiety; depression; sleep disorders; physical injury; and NCAA policies. We computed the total number of correct items.

Intentions

Items to measure a participant's intentions to provide culturally responsive care to student-athletes (Table 5) were adapted from the Clinical Cultural Competency Questionnaire (Like, 2011). Originally designed as 24 items to determine skills and levels of comfort, our survey presented participants with five items to be answered on a 5-point Likert scale asking participants how likely they were to do each, ranging from "*Extremely unlikely*" to "*Extremely likely*." The original questionnaire measured the intentions of

medical care providers, so our items were adapted to address mental health care providers. Participants with higher scores were more likely to intentionally provide culturally responsive care to student-athletes.

Table 6

Descriptive Information for all Key Control and Study Variables (Self-Efficacy General; Self-Efficacy Student-Athletes; Empathy General; Empathy Student-Athletes; Attitudes; Knowledge; Intentions)

Variable	*M*	*SD*	Min	Max	Cronbach's Alpha
SE general	4.13	.48	2.44	5.00	.83
SE student-athletes	3.94	.65	1.00	5.00	.90
Empathy general	4.32	.41	3.22	5.00	.67
Empathy student-athletes	4.02	.61	2.17	5.00	.76
Attitudes	3.63	.49	2.43	5.00	.72
Knowledge	3.70	1.28	.00	7.00	
Intentions	4.29	.63	1.00	5.00	.76

Note. SE general = Self-efficacy general; SE student-athletes = Self-Efficacy specific to student-athletes; Empathy student-athletes = Empathy for student-athletes; Intentions = Intentions to provide culturally responsive clinical care to student-athletes.

Data Analysis

Two hundred sixteen surveys were collected, but data from only 153 were included in the final analyses.

Results

Table 7

Sample Demographics Results (N = 153)

Characteristic	*n* (%)
Gender	
Female	129 (84.3)
Male	19 (12.4)
Other	5 (3.3)
Race/Ethnicity	
Asian	6 (3.9)
Black or African American	8 (5.2)
Hispanic/Latino	5 (3.3)
White	124 (81.0)
Multiracial	5 (3.3)
Other	2 (1.3)
Highest Level of Education	
Master's Degree	112 (73.2)
Doctoral	41 (26.8)
Type of Clinical Licensure	
Licensed Professional Counselor	82 (53.6)
Licensed Clinical Social Worker	28 (18.3)
Clinical Psychologist	27 (17.6)
Psychiatrist	0 (0.0)
Other	24 (15.7)
Alignment on Campus	
Select all that apply	
Academic Department	6 (3.9)
Athletics Department	10 (6.4)
Counseling Center	89 (58.2)
Student Health Services	19 (12.4)
Student Life	48 (31.4)
Student Affairs	15 (9.8)
Other	18 (11.8)

Table 7

Cont.

Characteristic	*n* (%)
Sport Organization Membership	
Yes	17 (11.1)
Cultural Awareness Training	
Yes	113 (73.9)
Cultural Awareness Training-Student Athletes	
Yes	57 (37.3)
School Association/Division	
NCAA Division I	47 (30.7)
NCAA Division II	14 (9.2)
NCAA Division III	29 (19.0)
NAIA	11 (7.2)
NJCAA	9 (5.9)
NCCAA	1 (0.7)
Other	16 (10.5)
Did participant play college/pro sport?	
Yes	17 (11.1)

Participants reported practicing in any clinical setting for a range of 0 to 35 years (*M*=12.1, *SD*=8.5). Similarly, participants had practiced in a college setting for a range of 0 to 31 years (*M*=8.0, *SD*=6.8). The percentage of student-athletes on a participant's caseload ranged from 0 to 100% (*M*=18.3, *SD*=26.9).

Associations of Demographic Variables

Most items in the model were related to one another, with the exception of knowledge related to the culture of athletics. The only item knowledge had a significant positive association with was the percentage of student-athletes on a mental health care

provider's caseload, suggesting that providers who worked with student-athletes had more knowledge about their experiences and culture.

Regression Analysis Controlling for Demographics

Next, each outcome variable was analyzed, controlling for all predictor variables (see Table 8). We found that percentage of student-athletes a mental health care provider had on their caseload was the only significant predictor of self-efficacy specific to student-athletes (B = .29), empathy specific to student-athletes (B = .31), attitude toward the culture of athletics (B = .27), and intention to provide culturally competent care to student-athletes (B = .24). Providers who worked at NCAA member institutions had higher general empathy (B = .23, p = .02) than those who did not and was the only predictor of general empathy.

Table 8

Regression Analysis of Each Study Variable (SE General; SE Student-Athlete; Empathy General; Empathy Student-Athlete; Attitudes; Knowledge; Intentions), Controlling for all Demographic Variables

	SE General		SE SA		Empathy Gen		Empathy SA		Attitudes		Knowledge		Intentions	
	B	*p*	*B*	*p*	*B*	*p*	*B*	*p*	*B*	*p*	*B*	*p*	*B*	*p*
Female	-.02	.86	-.03	.71	.16	.09	.17	.07	.13	.16	.06	.53	.09	.36
White	-.10	.30	.14	.14	-.01	.91	.01	.92	.08	.42	.04	.64	.06	.57
Master's degree	-.31	.03*	.17	.07	-.05	.72	-.13	.32	-.04	.65	-.00	.99	-.19	.16
LPC	.08	.62	.06	.72	-.07	.67	-.11	.49	.06	.72	-.16	.33	-.26	.12
LCSW	.23	.11	.03	.85	-.25	.08	-.15	.29	-.11	.43	-.16	.26	-.13	.37
Psychologist	-.28	.10	-.17	.32	-.32	.06	-.20	.24	-.04	.80	.12	.49	-.30	.08
NCAA	.06	.53	.17	.07	.23	.02*	.13	.17	-.04	.65	.14	.14	.10	.31
Played college/pro sport	.06	.54	.01	.91	.14	.19	.05	.62	.05	.63	.19	.06	.01	.94
Years in college setting	.17	.08	.15	.11	.00	.99	.11	.22	.17	.09	.10	.31	-.02	.84
% SA caseload	.19	.27	.29	.01**	-.06	.59	.31	.00**	.27	.01**	.08	.46	.24	.03*

Note. Years in college setting = Number of years in clinical practice in a college setting; % caseload SA = Percent of caseload that is student-athletes; SE general = Self-efficacy general; SE SA = Self-efficacy specific to student-athletes; Emp Gen = General empathy; Empathy SA = empathy for student-athletes; Intentions = Intentions to provide culturally responsive clinical care to student-athletes.
*$p < .05$; **$p < .01$.

Discussion and Implications

For predicting general self-efficacy, having a Master's level clinical degree was the only significant finding (*B* = -.31): providers with Master's degrees had lower self-efficacy than providers with Doctorates. Future research might explore feelings of inadequacy or other factors that influence a provider's belief in their own capacity to provide competent clinical care. However, self-efficacy specific to student-athletes was significantly predicted by the percentage of student-athletes on a provider's caseload (*p* = .01.), suggesting as the number of athletes on a provider's caseload increases, so does their self-efficacy in working with them.

Although not significant, the strongest predictor of knowledge was whether the participant played college or professional sports (*p* = .06): Participants who were former college or professional athletes tended to perform better when asked questions about the culture of athletics. Secondly, just more than half of the participants (58.9%) worked at NCAA member institutions. There were educational opportunities available for these individuals to learn about the culture of athletics and the unique needs of student-athletes, provided by the NCAA Sport Science Institute. Other colleges and universities may not offer the same resources that encourage integrating mental health awareness into athletics. Thus, the effect on a participant's knowledge about the culture of athletics seemed weak and insignificant.

Conclusions and Limitations

These findings have some important practical implications for university administrators to consider. Meanwhile, given that mental health care providers who work

with more student-athletes was the only predictor of X, Y, and Z should encourage administrators to look at the referral process for student-athletes, as well as the location on campus of the providers dedicated to their care. These measures can also enrich and improve the clinical care provision for student-athletes who have mental health concerns. Although demographic factors predicting a mental health care provider's knowledge related to the culture of athletics was not significant in this research, it does not mean that it is not important. Some measures can be taken to strengthen the influence of demographic variables on self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, and positive attitudes toward the culture of athletics, such as requiring management teams to distinguish which providers will provide clinical care to student-athletes, and providing cultural awareness training opportunities to enhance their sensitivity.

Although our study provides initial evidence as to which provider demographic variables are important to consider when making decisions about mental health care provision with collegiate student-athletes, limitations of this research do exist. First, our sample was primarily female (84%) and White (81%). However, this imbalance closely resembles the field of clinical care provision—74% female and 73% White (LeViness et al., 2018). Data were collected in July 2020, during the global COVID-19 pandemic. Therefore, many college and university employees were on summer break and/or not on campus due to public health recommendations. This may have negatively impacted sample size. It is also important to consider that the participants' answers were likely based on their experience before the COVID-19 pandemic.

Increasing cultural competency specific to collegiate student-athletes' unique needs is beneficial to the clinical mental health care provided on college campuses. However, the extant research on student-athlete mental health mainly focuses on care-seeking behaviors of the student-athlete, stigma, or coaches education. This research is one of the initial attempts to focus on mental health care providers' work with collegiate student-athletes rather than student-athletes themselves. This study may lead to a systemic recommendation for colleges and universities to have mental health care providers dedicated to working with student-athletes to optimize the outcome of treatment.

CHAPTER V

TESTING THE MODEL

Testing an expanded Theory of Planned Behavior in determining intention to provide culturally competent clinical mental health care to collegiate student-athletes

Abstract

Mental health care providers' cultural competency related to athletics is crucial to their clinical care provision for student-athletes on college campuses. However, little research has been conducted in applying a theoretical framework to explore providers' intentions to provide culturally competent clinical care to this specific student population. Understanding providers' perceptions of student-athletes is integral in assuring clinical care provision that is competent related to the culture of athletics. The purpose of this study was to test a conceptual model that adapted the Theory of Planned Behavior to explore the determinants of providers' intention to be culturally responsive to the unique needs of collegiate student-athletes. For this study, cultural competency was defined as the cumulative level of a provider's self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes toward the culture of athletics, and knowledge related to the culture of athletics. Data were collected using an online survey method, and the responses from 153 participants were analyzed using multiple regression analysis. The results indicated that all survey scales were stable and

reliable on which to base our data analysis results. Additionally, results suggested that the adapted TPB can be a useful framework in predicting mental health care providers' intention to be culturally responsive to student-athletes' unique needs. Implications for research are discussed.

Introduction

In recent years, the NCAA has openly recognized that mental health concerns are serious in intercollegiate athletics. Along with new regulations, the NCAA has, and continues to raise awareness of student-athletes' mental health needs, requiring member NCAA institutions to create and implement mental health protocols that include access and/or referral to licensed mental health professionals (Klenck, 2014; NCAA SSI, 2016; Way et al., 2019). Researchers and sport psychology professionals have long called for in-house mental health services within intercollegiate athletics (Connole et al., 2014; Hack, 2007; López & Levy, 2013). However, when mental health services are not provided "in-house" student-athletes may encounter barriers to seeking services independently. For example, a collegiate student-athlete may feel misunderstood and less likely to develop a relationship with a mental health professional who has little to no background or understanding of sports or collegiate athletics (Hack, 2007). Additionally, most university counseling centers operate during normal business hours, often coinciding with classes, practice, and competition schedules, making it difficult for student-athletes to attend counseling sessions (López & Levy, 2013). It is also common for campus counseling centers to become overbooked and restrict students to a fixed number of sessions, making it even more challenging to meet student-athletes' needs in a

timely manner (Gill, 2008; Goodwin, 2017). Thus, professionals trained and knowledgeable in working with this population can make a case for providing collegiate student-athletes with more accessible mental health services.

Aim of Study

Research has explored athletic directors' and coaches' perceptions and preferences in regards to sport psychology professionals. However, there is no existing literature that explores mental health care providers' self-efficacy, empathy, attitudes, and knowledge toward providing clinical services and support to collegiate student-athletes. Research is needed to explore what impedes providers from clinical care provision that is culturally competent related to the culture of athletics. Therefore, this study used an adapted Theory of Planned Behavior (TPB) to assess mental health care providers' self-efficacy related to communicating with student-athletes; empathy specific to student-athletes; positive attitudes toward the culture of athletics; and, knowledge related to the culture of athletics, simultaneously in an attempt to understand the antecedents of their behavior to provide culturally responsive care to student-athletes.

Theory of Planned Behavior

The Theory of Planned Behavior (TPB) states that behavioral achievement depends on motivation (intention) and ability. Then it suggests that behavioral intention, in turn, is determined by five major determinants—attitude towards behavior, subjective norms, social norms, perceived power, and perceived behavioral control. Meaning that the degree to which individuals see a certain behavior positively (attitude), or foresees that substantial others want them to engage in the behavior, and believe that they are

capable of carrying out the behavior, serve as direct determinants of the extent of their intention to perform the behavior (Ajzen, 1991). By and large, attitudes are the overall evaluation of the behavior by the individual (Ferdous, 2010). Beliefs determine these judgments about the extent to which one has access to resources or opportunities necessary to carry out the behavior effectively (Ajzen, 1991). Barriers to behavior are present when they require prerequisite knowledge, resources, and/or the cooperation of others (Gilbert et al., 1998). For behavioral intentions where skill or social cooperation is required, the TPB is used.

Conceptual Model

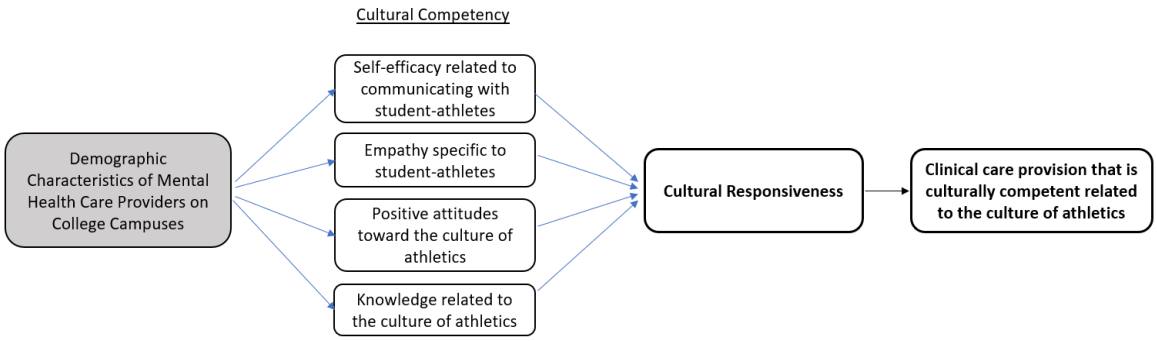
To explore the factors influencing mental health care providers' intentions to provide culturally responsive care to student-athletes, we built a theoretical model based on the Theory of Planned Behavior (TPB) (see Figure 3). Our research adapted the TPB by incorporating three variables (self-efficacy, empathy, and knowledge) and investigated how these variables influence individual's intentions to provide clinical mental health care to collegiate student-athletes. To the best of our knowledge, this was the first time to incorporate these three variables together into TPB to understand mental health care providers' behaviors.

Like the TPB, our model suggests that behavioral achievement depends on motivation (intention) and ability. It comprises four variables that collectively represent a person's actual control over the behavior: self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes toward the culture of athletics, and knowledge related to the culture of athletics. The research model used in

this study predicts mental health care providers' behavior by grafting the predictive model based on our operationalization of the term 'cultural competency.' According to our model, a provider's level of cultural competency predicts their intention to be culturally responsive, and ultimately, clinical care provision that is competent related to the culture of athletics.

Figure 2

Conceptual Model



The variables used to operationalize cultural competency in this study were informed by the NCAA Campus Stakeholder's Guide for Student-Athlete Mental Health (see Appendix A). Recommended by the NCAA Task Force to Advance Mental Health Best Practice Strategies, this guide is a resource designed for stakeholders who work outside of athletics to understand the unique cultural aspects of collegiate student-athletes and educational approaches for working with student-athletes.

Data and Research Methodology

Participants and Recruitment

Participants in this study were licensed, clinical mental health care providers who worked on American college or university campuses. This convenience sample was drawn from listservs shared by professional organizations, including Alliance of Social Workers in Sports; American College Counseling Association; American Counseling Association; Big Sky Sport Psychology; and the Collegiate Counseling & Sport Psychology Association. Following approval from the University of North Carolina at Greensboro Institutional Review Board, the study's primary investigator (PI) contacted participants three times to take part in the study and complete the online questionnaire powered by Qualtrics (Provo, UT). First, the PI sent an email to all potential participants, including a personal introduction, an explanation of the study, a description of the incentive opportunity, and a survey link. The PI sent a second email 14 days later to remind prospective participants to complete the survey and thank those who had already done so. Finally, the PI sent an email to the same list, 28 days following the original communication thanking those who had completed the survey and reminding those who had not. The survey was open to participants for 30 days. Once clicking on the Qualtrics survey link embedded in recruitment emails, participants choosing to complete the web-based survey provided consent electronically. After the survey, participants could choose to enter a raffle to win one of 10, $50 Visa gift cards by clicking on a separate Qualtrics link that was not linked to their survey answers.

Instrumentation

Demographic Information

Participants indicated their highest degree achieved; type of clinical license; affiliation with professional organizations; how many years in clinical practice; which department(s) on campus they aligned with; and percentage of student-athletes on their caseload (Table 9). These items were adapted from previous measurements of health care providers' cultural competency specific to their population of interest (Marra et al., 2010; Schim et al., 2003). With the exception of types of clinical licenses, binary variables were created for each predictor to compare participants who identified as one or another. For example, female was a binary variable created to compare participants who identified as male or female.

Table 9

Survey Variables

Variable	Description	Scale
Demographics	Participants were asked to provide personal information such as highest degree achieved; type of clinical license; affiliation with professional organizations; how many years in clinical practice; which department(s) on campus they report to; and, percent of student-athletes on their caseload	These items were adapted from previous measurements of health care providers' cultural competency specific to their population of interest (Marra et al., 2010; Schim et al., 2003).
Empathy General	Items to measure a clinician's general empathy were adapted from the Interpersonal Reactivity Index (Davis, 1980) and the Toronto Empathy Questionnaire (Spreng et al., 2009).	Sixteen items were answered on a 5-point Likert scale assessing how often the statements were true for the participants, ranging from "Rarely" to "Almost always." High scores indicated higher levels of participant empathy.

Table 9

Cont.

Variable	Description	Scale
Empathy specific to student-athletes	For this study, nine items that measure empathy were adapted from the IRI and TEQ. A second scale was designed to measure a participant's empathy specific to student-athletes, using a similar adaptation of the IRI and TEQ.	This athlete-specific scale included six items measured on a 5-point Likert scale ranging from "Rarely to "Almost always." High scores indicated higher levels of participant empathy specific to student-athletes.
Self-efficacy General	The items used to measure a participant's self-efficacy were adapted from the Self-Efficacy Formative Questionnaire (Erickson & Noonan, 2018) and the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995).	For this study, the scale we designed to assess a participant's general self-efficacy adapted nine items from the Self-Efficacy Formative Questionnaire and the GSW. Participants were asked how well each item described them as a licensed clinician, ranging from "Not at all" to "Extremely well." Higher scores indicated higher levels of general Self-Efficacy.
Self-efficacy specific to student-athletes	Six additional items were adapted to assess a mental health care provider's self-efficacy specific to student-athletes.	These items were answered on a 5-point Likert scale asking how well the statements describe them in their work with student-athletes, ranging from "Not at all" to "Extremely well." Higher scores were associated with higher levels of self-efficacy specific to student-athletes.
Knowledge	For this study, knowledge questions captured baseline knowledge to measure the extent to which participants have stored factual information in long-term memory and how well they can retrieve and respond with that information when asked a question about the culture of athletics. Items scored the participants' knowledge about care coordination; alcohol and substance use; body image and disordered eating; anxiety; depression; sleep disorders; physical injury and NCAA policies.	These items were scored as "0" for incorrect responses, and "1" for correct responses. Thus, a participant with a higher score exhibited higher levels of knowledge about the culture of athletics.

Table 9

Cont.

Variable	Description	Scale
Attitudes	Items to measure a participant's attitudes toward student-athletes were adapted from the Sport Attitude Survey (Yakut et al., 2016), and the Positive Thinking Scale (Diener et al., 2009). For this study, seven items were adapted from the SAS and PTS to measure a participant's attitudes toward the culture of athletics.	They were answered on a 5-point Likert scale asking participants to indicate how much they agree or disagree with each statement, ranging from "Strongly disagree" to "Strongly agree." Based on the scales from which our tool was adapted, higher scores indicate more positive attitudes.
Intentions	Items to measure a participant's intentions to provide culturally responsive care to student-athletes were adapted from the Clinical Cultural Competency Questionnaire (Like, 2011).	Our survey presented participants with five items to be answered on a 5-point Likert scale asking participants how likely they are to do each, ranging from "Extremely unlikely" to "Extremely likely." Participants with higher scores were more likely to intentionally provide culturally responsive care to student-athletes.

Self-Efficacy

We used two measures of self-efficacy (Table 9). To measure *general self-efficacy*, we adapted nine items from the Self-Efficacy Formative Questionnaire (SFQ; Erickson & Noonan, 2018) and the General Self-Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995). The SFQ was written for teaching professionals, so items related specifically to the classroom were removed; other items were adapted to represent student-athletes rather than students in academic settings. The GSW was adapted by removing items that were about personal self-efficacy, and adapting items about external influence, to make them specific to the culture of sports. Participants indicated how well each item described them as a licensed mental health care provider, ranging from X =

"*Not at all*" to Y = "*Extremely well*." To measure *self-efficacy related to communicating with student-athletes*, we adapted six items from the SFQ and the GSE. Participants indicated how well each statement described them in their work with student-athletes, from 1 = "*Not at all*" to 5 = "*Extremely well*." Higher scores were associated with higher levels of self-efficacy.

Empathy

Items to measure a clinician's general empathy (Table 9) were adapted from the Interpersonal Reactivity Index (Davis, 1980) and the Toronto Empathy Questionnaire (Spreng et al., 2009). The Interpersonal Reactivity Index (IRI) defines empathy as the reactions of one individual to the observed experiences of another (Davis, 1980). Participants answered 28 items on a 5-point Likert scale ranging from "*Does not describe me well*" to "*Describes me very well*." The Toronto Empathy Questionnaire (TEQ) represents empathy as a primarily emotional process. In previous studies, the TEQ demonstrated strong convergent validity and positively correlated with behavioral measures of social decoding.

For this study, nine items that measure empathy were adapted from the IRI and TEQ. Our adaptation of both of these scales eliminated items that were very specific to certain life events, including only the items that participants could apply in their clinical practice with student-athletes. They were answered on a 5-point Likert scale assessing how often the statements were true for the participants, ranging from "*Rarely*" to "*Almost always*." High scores indicated higher levels of participant empathy. A second scale was designed to measure a participant's empathy specific to student-athletes, using a similar

adaptation of the IRI and TEQ. Following Dillman (2007), this athlete-specific scale included six items measured on a 5-point Likert scale ranging from "*Rarely*" to "*Almost always*."

Attitudes

Items to measure a participant's positive attitudes toward the culture of athletics (Table 9) were adapted from the Sport Attitude Survey (Yakut et al., 2016), and the Positive Thinking Scale (Diener et al., 2009). The Sport Attitude Survey (SAS) was created to measure important sub-areas in sport beliefs and attitudes, including a participant's belief that sport participation builds character, enhances health, should support diversity, and is important to early education. The scale includes 75 items measured on a 4-point Likert scale ranging from "*Strongly disagree*" to "*Strongly agree*." Higher scores suggest more positive attitudes. The Positive Thinking Scale (PTS) has 22 yes/no items with an equal number of positive and negative items. The measure is used to assess a person's positive versus negative thinking about important aspects of their lives.

For this study, seven items were adapted from the SAS and PTS to measure a participant's attitudes toward the culture of athletics. Items we included were initially written for general application about athletes in society, so we adapted them to be more relevant to the participants' attitudes toward collegiate student-athletes and the culture of athletics. They were answered on a 5-point Likert scale asking participants to indicate how much they agreed or disagreed with each statement, ranging from "*Strongly disagree*" to "*Strongly agree*." Based on the scales from which our tool was adapted, higher scores indicated more positive attitudes.

Knowledge

Knowledge items were based on elements of various educational initiatives related to collegiate athletics, including care coordination; alcohol and substance use; body image and disordered eating; anxiety; depression; sleep disorders; physical injury; and NCAA policies (Table 9). We computed the total number of correct items.

Intentions

Items to measure a participant's intentions to provide culturally responsive care to student-athletes (Table 9) were adapted from the Clinical Cultural Competency Questionnaire (Like, 2011). Originally designed as 24 items to determine skills and levels of comfort, our survey presented participants with five items to be answered on a 5-point Likert scale asking participants how likely they were to do each, ranging from "*Extremely unlikely*" to "*Extremely likely*." The original questionnaire measured medical care providers' intentions, so our items were adapted to address mental health care providers. Participants with higher scores were more likely to intentionally provide culturally responsive care to student-athletes.

Measures

Descriptive statistics were computed and included frequencies, means, and standard deviations. Cronbach's alpha was used to determine construct validity. A threshold of 0.70 was used to demonstrate consistency. The General Empathy Scale, adapted from the Interpersonal Reactivity Index (Davis, 1980) and Toronto Empathy Questionnaire (Spreng et al., 2009), showed lower reliability than the other scales but was still within an acceptable range (.67). Overall, however, Cronbach's Alpha tests

suggested that these were stable and reliable scales on which to base data results (see Table 10). Knowledge was a summed score, and therefore reliability was not reported.

Table 10

Descriptive Information for all Key Control and Study Variables (Self-Efficacy General; Self-Efficacy Student-Athletes; Empathy General; Empathy Student-Athletes; Attitudes; Knowledge; Intentions)

Variable	*M*	*SD*	Min/Max	Skewness	Cronbach's Alpha
SE general	4.13	.48	2.44/5.00	-.55	.83
SE student-athletes	3.94	.65	1.00/5.00	-1.28	.90
Empathy general	4.32	.41	3.22/5.00	-.43	.67
Empathy student-athletes	4.02	.61	2.17/5.00	-1.05	.76
Attitudes	3.63	.49	2.43/5.00	-.15	.72
Knowledge	3.70	1.28	.00/7.00	-.11	
Intentions	4.29	.63	1.00/5.00	-1.74	.76

Note. SE general = Self-efficacy general; SE student-athletes = Self-Efficacy specific to student-athletes; Empathy student-athletes = Empathy for student-athletes; Intentions = Intentions to provide culturally responsive clinical care to student-athletes.

Data Analysis

Two hundred sixteen surveys were collected, but only data from 153 were included in the final analyses.

Results

Respondent Characteristics

Two hundred sixteen surveys were collected, but only data from 153 were included in the final analyses. Surveys were excluded if the participant were not a

licensed mental health care provider working with college students or if there were no valid data available. Slightly more than half of the participants (54%) were Licensed Professional Counselors, followed by Licensed Clinical Social Workers (18%), Clinical Psychologists (18%), and providers who have various other clinical licenses, including Marriage & Family Therapists and Licensed Substance Abuse Counselors (16%). More than half of the participants worked within the Counseling Center on their campus (58%), and 6% were aligned with the Athletics Department. And, participants reported an average of 18% of their caseload was made up of student-athletes.

Table 11

Sample Demographics Results (N = 153)

Characteristic	*n* (%)	Min	Max	*M* (*SD*)
Gender				
Female	129 (84.3)			
Male	19 (12.4)			
Other	5 (3.3)			
Race/Ethnicity				
Asian	6 (3.9)			
Black or African American	8 (5.2)			
Hispanic/Latino	5 (3.3)			
White	124 (81.0)			
Multiracial	5 (3.3)			
Other	2 (1.3)			
Highest Level of Education				
Master's Degree	112 (73.2)			
Doctoral	41 (26.8)			
Type of Clinical Licensure				
Licensed Professional Counselor	82 (53.6)			
Licensed Clinical Social Worker	28 (18.3)			
Clinical Psychologist	27 (17.6)			
Psychiatrist	0 (0.0)			
Other	24 (15.7)			

Table 11

Cont.

Characteristic	*n* (%)	Min	Max	*M* (*SD*)
Alignment on Campus *Select all that apply*				
Academic Department	6 (3.9)			
Athletics Department	10 (6.4)			
Counseling Center	89 (58.2)			
Student Health Services	19 (12.4)			
Student Life	48 (31.4)			
Student Affairs	15 (9.8)			
Other	18 (11.8)			
Sport Organization Membership				
No	136 (88.9)			
Yes	17 (11.1)			
Cultural Awareness Training				
No	40 (26.1)			
Yes	113 (73.9)			
Cultural Awareness Training-Student Athletes				
No	96 (62.7)			
Yes	57 (37.3)			
School Association/Division				
NCAA Division I	47 (30.7)			
NCAA Division II	14 (9.2)			
NCAA Division III	29 (19.0)			
NAIA	11 (7.2)			
NJCAA	9 (5.9)			
NCCAA	1 (0.7)			
Other	16 (10.5)			
Did participant play college/pro sport?				
No	136 (88.9)			
Yes	17 (11.1)			
Number of years practicing in any setting		0.0	35.0	12.1 (8.5)
Number of years practicing in college setting		0.0	31.0	8.0 (6.8)
% Student-Athletes on Caseload		0.0	100.0	18.3 (26.9)

Multiple Regression

Three multiple regression models were used to test our conceptual model. Model 1 tested whether several demographic characteristics (i.e., gender, race, number of years practicing in a college setting, and history of sport participation) predicted intention to provide culturally responsive care to student-athletes (see Table 12). None of these variables were significantly associated with intentions.

Table 12

Summary Statistics, Correlations, and Results from the Regression Analysis

	Model 1		Model 2		Model 3	
	Standardized Beta	*p*	Standardized Beta	*p*	Standardized Beta	*p*
(Constant)		.00		.00		.09
Female	.12	.24	.09	.36	.04	.62
White	.06	.53	.01	.91	-.04	.62
Number of years in college setting	-.01	.94	-.02	.84	-.11	.21
Did participant play college/pro sport	.13	.18	-.04	.73	-.05	.64
Type of clinical license	.09	.38	.02	.87	.10	.27
Percentage student-athletes on caseload			.24	.10	.10	.42
NCAA			.06	.57	-.07	.46
Received CC training			.18	.08	.25	.00*
Sport organization membership			.08	.58	.00	.98
Self-Efficacy specific to student-athletes					.30	.00**
Empathy specific to student-athletes					.37	.00**
Attitude					.12	.16
Knowledge					-.08	.38
R^2	.04		.12		.45	

Note. Dependent Variable: Intention. *$p < .05$; **$p < .01$.

Model 2 tested whether demographic characteristics (i.e., gender, race, number of years practicing in a college setting, and history of sport participation), as well as professional factors (i.e., percentage of student-athletes on caseload, working, at an NCAA member institution, participants in cultural competency training specific to student-athletes, and membership in a sport-related professional organization), predicted intention to provide culturally responsive care to student-athletes. None of these variables were significantly associated with intentions

Model 3 tested whether demographic characteristics (i.e., gender, race, number of years practicing in a college setting, and history of sport participation), as well as professional factors (i.e., percentage of student-athletes on caseload, working, at an NCAA member institution, participants in cultural competency training specific to student-athletes, and membership in a sport-related professional organization) and outcome variables (i.e., self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes toward the culture of athletics and knowledge related to the culture of athletics), predicted intention to provide culturally responsive care to student-athletes.

Participation in cultural competency training related to student-athletes, self-efficacy related to communicating with student-athletes, and empathy specific to student-athletes was positively associated with intentions to provide culturally competent clinical care to student-athletes after controlling for the other variables in the model.

Discussion and Implications

This research's primary objective was to assess the adapted TPB model in predicting mental health care providers' intentions to provide clinical care to collegiate student-athletes that is culturally competent related to the culture of athletics. The results suggest that the adapted TPB can be a useful framework in predicting mental health care providers' intention to be culturally responsive to student-athletes' unique needs. Multiple linear regression indicated that mental health care providers who internalized higher amounts of self-efficacy related to communicating with student-athletes and empathy specific to student-athletes were positively associated with intention to provide clinical care that is culturally competent related to the culture of athletics. Neither positive attitudes toward the culture of athletics nor knowledge related to the culture of athletics were found to be uniquely predictive of the intention to provide culturally responsive care. However, bivariate analyses indicated that all four predictors were correlated and thus predictive of intention to provide culturally responsive care to student-athletes.

The statistical significance of self-efficacy related to communicating with student-athletes makes practical sense ($\beta = 0.30$). Self-efficacy is a person's belief in their ability to succeed in a particular situation and is the determinant of how people think, behave, and feel (Bandura, 1977). According to Bandura, people with a strong sense of self-efficacy develop a deeper interest in the activities in which they participate, form a stronger sense of commitment to their interests and activities, and view challenging problems as tasks to be mastered. Furthermore, successfully performing a task

strengthens a person's sense of self-efficacy. A mental health care provider's self-efficacy related to communicating with student-athletes plays an important role in how the provider supports an athlete's health and well-being. Even when things become difficult, a provider with high self-efficacy will remain optimistic and confident in their abilities to communicate with the student-athlete.

The statistical significance of empathy specific to student-athletes is also easy to explain ($\beta = 0.37$). Riess (2017) indicated that empathy plays a critical interpersonal and societal role, enabling sharing of experiences, needs, and desires between individuals. Empathy enables individuals to understand and feel the emotional states of others, resulting in compassionate behavior. Not surprisingly, mental health care providers who had higher levels of empathy specific to student-athletes reported higher intentions to provide clinical care that is culturally competent related to the culture of athletics. This result suggests that college and university administrators provide opportunities for clinical mental health care providers to attend training programs to enhance their cultural awareness of various student populations, including collegiate student-athletes. Other ways leadership may help increase empathy among mental health care providers may include providing workshops that increase empathetic listening skills or create environments for providers to challenge any prejudices they have towards student-athletes and discover commonalities. Further supporting the importance of mental health care providers attending trainings or engaging in other professional development specific to the culture of athletics, receiving cultural competency training specific to student-

athletes was the only demographic characteristic that predicted intentions to provide culturally responsive clinical care.

Neither attitudes related to the culture of athletics nor knowledge specific to the culture of athletics were statistically significant. This makes practical sense. Participants may hold attitudes toward the culture of athletics for different reasons. Attitudes become stronger when participants have direct positive or negative experiences with student-athletes, and particularly if those experiences have been in strong positive or negative contexts. In this study, the average percentage of student-athletes on a mental health care provider's caseload was 18.3%. This suggests that most participants had no opportunity to develop more positive attitudes related to the culture of athletics through direct experiences with student-athletes. Similarly, participants' lack of experience working clinically with student-athletes could have negatively impacted their level of knowledge related to the culture of athletics.

Regression results of the nine demographic predictor variables (gender; race; number of years the provider has worked in a college setting; if the provider played college or professional sports; type of clinical license; percentage of student-athletes on their caseload; if the provider works at an NCAA member institution; if the provider received cultural competency training specific to student-athletes; and if the provider belonged to a sport-related professional organization) revealed that only receiving cultural competency training specific to student-athletes was predictive of intentions to provide culturally responsive clinical care (p = .00). This further emphasizes the

importance of mental health care providers attending trainings or engaging in other professional development specific to the culture of athletics.

Conclusions and Limitations

These findings have some important practical implications for colleges to consider. Professional development opportunities for mental health care providers could help providers understand the unique needs student-athletes have compared to their non-athlete peers. These efforts will enrich and improve the clinical care provision for student-athletes who have mental health concerns. Although other potential predictive factors were not significant in this research, it does not mean that they are not important. While knowledge alone was not a sufficient predictor of intentions, it is likely a necessary component for providing foundational knowledge and context critical to the other variables of interest.

Increasing cultural competency specific to collegiate student-athletes' unique needs is beneficial to their clinical care provision from mental health care providers on college campuses. However, the extant research on student-athlete mental health mainly focuses on care-seeking behaviors of the student-athlete, stigma, or coaches' education. This research is one of the initial attempts to study mental health care providers related to their clinical work with student-athletes. In this research, we developed a theoretical model to examine mental health care providers' intentions to provide culturally competent care to collegiate student-athletes based on the adapted TPB. The findings confirmed the usefulness of the adapted TPB model in determining intention. Furthermore, the results indicated that a mental health care provider's attendance in

cultural competency trainings specific to student-athletes, self-efficacy related to communicating with student-athletes, and empathy specific to student-athletes were identified as the main predictors of their intention to provide culturally responsive clinical care.

Although our study provides initial evidence that our operationalization of cultural competency can be used in the field when working with student-athletes, limitations of this research do exist. First, our sample produced a gender imbalance (84% female participants) and race imbalance (81% White). However, it is important to note that this closely resembles the field of clinical care provision—74% female and 73% White (LeViness et al., 2018). Data were collected in July 2020, during the global COVID-19 pandemic. Therefore, many college and university employees were on summer break and/or not on campus due to public health recommendations. This may have negatively impacted sample size. It is also important to consider that the participants' answers were likely based on their experience before the COVID-19 pandemic.

This study may lead to a systemic recommendation for colleges and universities to offer professional development and cultural competency training opportunities to clinical mental health care providers who work on their campuses.

CHAPTER VI

DATA-DRIVEN MEMO AND EXECUTIVE SUMMARY TO NCAA

MEMORANDUM

Date: February 24, 2021
Subject: "The Role of Cultural Competency in the Provision of Clinical Mental Health Care for Collegiate Student-Athletes"
To: Dr. Brian Hainline, Chief Medical Officer, NCAA Sport Science Institute
From: Lindsey Sanders, MSW, LCSW

Participants

Participants in this study were licensed, clinical mental health care providers who work on American college or university campuses. This convenience sample was drawn from listservs of professional organizations, including Alliance of Social Workers in Sports; American College Counseling Association; American Counseling Association; Big Sky Sport Psychology; and the Collegiate Counseling & Sport Psychology Association. Participants were contacted via email three times to participate in the study and complete the online questionnaire powered by Qualtrics.

Characteristic	***n* (%)**	**Min**	**Max**	***M* (*SD*)**
Female	129 (84.3)			
White	124 (81.0)			
Embedded in Athletics	10 (6.4)			
Training re: sports culture	57 (37.3)			
NCAA member institution	90 (58.9)			
Played college/pro sport	17 (11.1)			
Characteristic	***n* (%)**	**Min**	**Max**	***M* (*SD*)**

Number of years practicing in any setting	0.0	35.0	12.1 (8.5)
Number of years practicing in college setting	0.0	31.0	8.0 (6.8)
% Student-Athletes on Caseload	0.0	100.0	18.3 (26.9)

Key Findings

- The key constructs of cultural competency related to athletics were based on the content of the NCAA Stakeholders Guide. Data suggest that the NCAA's approach could effectively change providers' intentions to provide culturally responsive clinical care with collegiate student-athletes.
- The findings support the conceptualization of cultural competency related to the culture of athletics, as self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes related to the culture of athletics, and knowledge related to the culture of athletics.
- The percentage of student-athletes on a provider's caseload was a significant predictor of their self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes related to the culture of athletics, and intention to provide culturally responsive care to collegiate student-athletes.
- Providers who worked at NCAA member institutions had higher levels of self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, knowledge related to the culture of athletics, and a higher average number of student-athletes on their caseload

- Providers who received cultural competency training related to the culture of athletics and who also had high levels of self-efficacy and empathy specific to student-athletes were most likely to have intentions to provide culturally responsive clinical care to student-athletes

Recommendations

Based on this study's findings and my professional experience as a licensed mental health care provider to collegiate and professional athletes, the specific recommendations I propose to the NCAA are listed below.

- Colleges could either employ a clinical mental health care provider within athletics or identify providers within the university counseling center who specialize in care provision to student-athletes and to whom all student-athlete referrals are made (consistent with Mental Health Best Practice strategies).
- The NCAA could develop educational modules aimed at increasing provider self-efficacy to employ empathic listening and communication skills using scenarios and examples specific to student-athletes and the culture of athletics.
- To improve attitudes about student-athletes and the culture of athletics, the NCAA could update or supplement the existing "day in the life of a student-athlete" video. The new video(s) should be developed with care providers as the target audience and focus on stigma, myths, and barriers student-athletes face related to mental health care.

- The NCAA could partner with mental health professional organizations to raise awareness, support development, and provide training sessions specific to the culture of athletics for their members.
- While this study supports the NCAA Stakeholders Guide as an evidence-informed intervention, it is not yet evidence-based. Therefore, future longitudinal research should evaluate its effectiveness and begin to build the evidence-base.
- The forthcoming evaluation results should be viewed with consideration to a more comprehensive approach ultimately needed to increase cultural competency in a significant and impactful way. For example, the NCAA could develop a workbook to accompany the Stakeholders Guide that would help providers further internalize the content. The workbook could be developed using a motivational interviewing approach that would allow providers to complete exercises and reflections to promote internalization as they work through the Stakeholders Guide.

Please see the Executive Summary for additional study details.

EXECUTIVE SUMMARY

Date: February 24, 2021
Subject: "The Role of Cultural Competency in the Provision of Clinical Mental Health Care for Collegiate Student-Athletes"
To: Dr. Brian Hainline, Chief Medical Officer, NCAA Sport Science Institute
From: Lindsey Sanders, MSW, LCSW

Background

According to the National Collegiate Athletic Association (NCAA), there are over 494,000 student-athletes who compete in sanctioned athletics nationwide. Research suggests that collegiate student-athletes and non-athlete students experience depression and other mental health concerns at similar rates. However, the additional demands of being an athlete may lead to additional psychological distress that could result in various negative outcomes, including performance obstacles and anxiety, prolonged injury rehabilitation, disordered eating and eating disorders, identity confusion, and un/expected retirement from sport. The NCAA has openly recognized that mental health concerns are serious in intercollegiate athletics. However, a student-athlete may feel misunderstood and less likely to develop a relationship with a mental health professional who has little-to-no background or understanding of sports or collegiate athletics. Additionally, most university counseling centers operate during normal business hours, often coinciding with classes, practice, and competition schedules, making it difficult for student-athletes to attend counseling sessions. Mental health care providers' cultural competency related to the culture of athletics is crucial to their clinical care provision for collegiate student-athletes. However, little research has been conducted to apply a theoretical framework to explore providers' intentions to provide culturally competent care to this specific student

population. Understanding providers' perceptions of student-athletes is integral in assuring clinical care provision that is culturally competent related to the culture of athletics.

Highlights

Increasing cultural competency specific to collegiate student-athletes' unique needs is beneficial to their clinical care provision from mental health care providers on college campuses. However, the extant research on student-athlete mental health mainly focuses on care-seeking behaviors of the student-athlete, stigma, or coaches education. This research is one of the initial attempts to learn more about student-athlete mental health from the care provider's perspective. The results indicated that the providers' intentions to provide culturally responsive care to student-athletes were predicted by self-efficacy related to communicating with student-athletes, empathy specific to student-athletes, positive attitudes toward the culture of athletics, and knowledge related to the culture of athletics. Based on these findings, it can be predicted that mental health care providers who have high levels of these four predictors are more likely to form the intention to provide culturally responsive clinical care to student-athletes.

Our findings suggest that self-efficacy related to communicating with student-athletes was best predicted by the percentage of student-athletes a mental health care provider had on their caseload. Providers who worked at NCAA member institutions had higher empathy than those who did not and were the best predictor of general empathy. However, empathy specific to student-athletes was only significantly predicted by the percentage of student-athletes on their caseload. The percentage of student-athletes on a

mental health care provider's caseload was also the only significant predictor of their attitude toward the culture of athletics and intention to provide clinical care that is culturally competent related to the culture of athletics. This finding was highly correlated with the providers' alignment on campus. Based on this finding, colleges and universities should consider dedicating mental health care providers to clinical care for student-athletes, regardless of what department on campus to which the provider is aligned (e.g., counseling center, athletics).

Additionally, our study suggests that mental health care providers who received cultural competency training related to student-athletes have higher intentions to provide culturally responsive clinical care to student-athletes. Considering these findings, professional development and cultural competency training opportunities should be launched by the NCAA. These programs can help providers to understand the unique needs student-athletes have, compared to their non-athlete peers.

Discussion

The findings in this study confirmed the usefulness of our operationalization of cultural competency specific to the culture of athletics.

Data and Research Methodology

Participants in this study were licensed, clinical mental health care providers who worked on American college or university campuses. These clinicians were located in a variety of campus departments, including but not limited to: counseling centers, student health services, and athletics. The convenience sample was drawn from listservs of professional organizations, including Alliance of Social Workers in Sports; American

College Counseling Association; American Counseling Association; Big Sky Sport Psychology; and the Collegiate Counseling & Sport Psychology Association. Participants were contacted via email three times to participate in the study and completed the online questionnaire powered by Qualtrics. Two hundred sixteen surveys were collected, but only data from 153 were included in the final analysis. More than half of the participants were aligned with the Counseling Center on their campus (58%), and 6% were aligned with the Athletics Department. Only 11% played intercollegiate or professional sports. Participants reported an average of 18% of their caseload was made up of student-athletes. Just more than half of the participants worked at NCAA member institutions (58.9%).

The NCAA Campus Stakeholders Guide for Student-Athlete Mental Health informed the variables used to operationalize cultural competency in this study. The survey was designed to obtain self-report measures of a participant's demographics, general self-efficacy, self-efficacy related to communicating with student-athletes, general empathy, empathy specific to student-athletes, attitudes toward the culture of athletics, knowledge related to the culture of athletics, and intentions to provide culturally responsive care to collegiate student-athletes. Knowledge items were designed based on the core constructs of the NCAA Stakeholders Guide, including care coordination; alcohol and substance use; body image and disordered eating; anxiety; depression; sleep disorders; physical injury; and NCAA policies. Confirmatory factor analysis was conducted to evaluate the model's reliability and validity. All scales were found to be stable and reliable on which to base the results of our data.

Recommendations

This study validated the adapted Theory of Planned Behavior, suggesting that future research in the field of student-athlete mental health should incorporate our model. Additionally, prevention scientists developing interventions and trainings to increase cultural competency now have a blueprint for the content that should be included. This research provides the foundation for any future research in this area.

Based on this study's findings, a valid argument can be made to either employ a clinical mental health care provider within athletics or to identify providers within the university counseling center who specialize in care provision to student-athletes and to whom all student-athlete referrals are made.

Our findings justify raised awareness and increased foundational knowledge of mental health care providers related to collegiate student-athletes' unique needs and cultural expectations. This can be done in various ways, including online educational modules, seminars, certifications, and other professional development opportunities.

While this study supports the NCAA Stakeholders Guide as an evidence-informed intervention, it is not yet evidence-based. Therefore, future longitudinal research could evaluate its effectiveness and begin to build the evidence-base. However, it is important to acknowledge that this study justifies that the Stakeholders Guide is ready for an evaluation. The forthcoming evaluation results should be viewed with consideration to a more comprehensive approach ultimately needed to increase cultural competency in a significant and impactful way.

These findings have other important practical implications for the NCAA to consider. First, the NCAA SSI should launch professional development and cultural competency training opportunities to help mental health care providers understand the unique needs of collegiate student-athletes.

This study may lead to a systemic recommendation for NCAA member institutions to provide mental health care providers with the access and resources to attend such events, which should ultimately lead to clinical care provision that is culturally competent related to the culture of athletics.

Limitations

Although our study provides initial evidence that our operationalization of cultural competency can be used in the field when working with student-athletes, the limitations of this research do exist. First, our sample produced a great gender imbalance (84% female participants) and race imbalance (81%). While this closely resembles the field of clinical care provision—74% female and 73% White, future research may benefit from a more targeted recruitment strategy to address the imbalance in the field. Data were collected in July 2020 during the global COVID-19 pandemic. Therefore, many college and university employees were on summer break and/or not on campus due to public health recommendations. This may have negatively impacted sample size. It is also important to consider that the participants' answers were likely based on their experiences before the COVID-19 pandemic.

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APPENDIX A

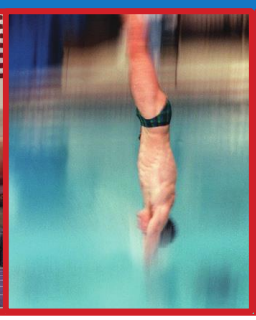
STAKEHOLDER'S GUIDE

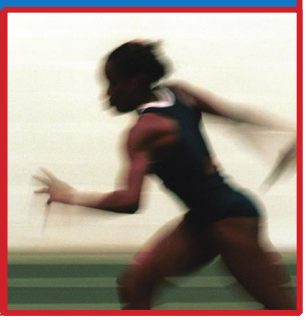
In 2017, in response to the NCAA Chief Medical Director's statement that prioritized education and awareness about student-athlete mental wellness, the Sport Science Institute (SSI) hosted the Task Force to Advance Mental Health Best Practice Strategies at the national office in Indianapolis, IN. The goals for the task force were three-fold: (a) develop tools and strategies to assist member schools with the implementation of the Mental Health Best Practices; (b) identify emerging issues; and (c) engage additional constituents and stakeholders. As an outcome of this Task Force, best practices, recommendations, research agendas, and educational efforts to support and promote the health and safety of college student-athletes have been developed. Specifically, the following tools were designed to help athletics department staff, conference offices, and campus stakeholders understand and support student-athlete mental wellness, and to implement the Mental Health Best Practices, as defined by SSI: (a) Mental Health Workshop Planning Kit for conference offices—a resources to assist NCAA conference offices in planning and implementing a mental health workshop for member schools; (b) Mental Health Interdisciplinary Team Planner for schools—designed for athletics department staff to support student-athlete mental health care in collaboration with their campus partners; and (c) Guide for Student-Athlete Mental Health for Campus Stakeholders.

In 2019, an effort to update the Stakeholders Guide was driven by Dr. Emily Kroshus (University of Washington) and Lindsey Sanders, MSW, LCSW (UNC Greensboro) under the guidance and support of Dr. Brian Hainline (NCAA Chief Medical Officer). As of the date of this dissertation, the updated version has not been released; however, this study was based on the constructs as outlined below.

HELPING SUPPORT STUDENT-ATHLETE MENTAL HEALTH:

A primer for campus stakeholders outside of athletics





Supporting Our Student-Athletes' Mental Health: A Primer for the Campus Community

WHO is this primer for?
This primer is for college counseling center clinicians and other student health center employees who work with student-athletes who present with mental health concerns.

WHY is a student-athlete any different from anyone else that I treat?
Nationwide, more than 460,000 student-athletes participate in sports for which the NCAA conducts championships, with many more participating on intramural and club teams. Student-athletes are thus a sizeable constituent group for student health services. For many student-athletes, time demands (practice, competition, travel, injury rehabilitation), pressures (self-imposed, as well as from coaches, teammates, parents and fans), and narrow identity as an athlete can have a unique influence on their mental health and mental health-related care seeking. Injury and transition from sport (e.g., prior to graduation) can be times of particular stress for student-athletes. Formative feedback from athletes suggests one barrier to care seeking is believing that mental health professionals outside of athletics don't understand their pressures and experiences in the athletics setting.

Mental health symptoms and disorders in student-athletes are quite common, occurring in about one-quarter of this group in any given year. Some of the most common mental health disorders are anxiety disorders, depression, and eating disorders. Although less common, sleep disorders and substance use disorders in student-athletes can have lifelong impact. It is important for college counseling center clinicians to remember that mental health exists on a continuum, and that a person fluctuates on the continuum depending on internal or external factors.

WHAT can I do?
Meeting the mental health care needs of student-athletes requires ensuring they are accessing care, which on many campuses will be outside of the athletics setting. Strong and trusting partnerships between student health services and athletics are imperative to meet the mental health needs of student-athletes. This may include the provision of mental health services to individual student-athletes, educational sessions for teams to encourage mental health help seeking, or consulting with athletics departments to ensure evidence-based referral practices are being employed.

HOW can I learn more?
In the sections that follow, the following information is covered:

1) Suggestions for strengthening collaboration with athletics.
2) Student-athlete relevant information for clinicians about mental health and safety concerns, including risk factors in the sport environment, and athletic performance consequences of untreated mental health symptoms and disorders.

"The stereotype is that student-athletes are tough or more resilient than others. No, people are people." – Dr. Brian Hainline, Chief Medical Officer, NCAA

Section 1: Collaboration with athletics

Unique issues related to confidentiality in the collegiate sport settings

- **Multiple stakeholders.** Principles of confidentiality should be clearly established and communicated to all stakeholders, which may include coaches, athletic trainers, team physicians, and parents.
- **Potential coach involvement.** Student-athletes should be able to seek mental health care with complete confidentiality. However, some student-athletes may find that a limited level of communication with coaches about their mental health care seeking is appropriate. Some coaches may pressure student-athletes or medical staff for information about the student-athlete's mental health and mental health care seeking to the extent they believe it is relevant for their competitive decision making. It is critical that counseling center clinicians talk to student-athletes about the difference between healthy communication with coaches versus communications that may violate a student-athlete's privacy. Regular communication with coaches related to student-athlete confidentiality may also help limit intentional or unintentional pressure from coaches on student-athletes and medical staff.
- **Integration with sports medicine care.** Clinicians should consult legal services regarding how confidentiality of student-athlete care limits a clinician's communication about potentially at-risk students with sports medicine staff, athletics administration, coaches and college administration. Your school should have an informed consent process that identifies the construct of care, includes a release of information, and is an appropriate approach for allowing a clinician to confirm that a student-athlete participates in mental health counseling.
- **Off campus referrals**. Institutions that refer student-athletes for care off-campus should have clear communication strategies about confidentiality of student-athlete care, and pathways for how and what information is communicated, consistent with student-athlete consent.

Unique issues related to care coordination with collegiate student-athletes

- **Different players.** The athletic trainer is often the first point of contact in coordinating and managing mental health concerns in student-athletes; however, this role may also be played by a team physician or other licensed medical personnel in the sport setting. Coordinating and managing mental health care should be distinguished from more formal evaluation and treatment of student-athletes with mental health symptoms or disorders.
    - Formal evaluation and treatment should be conducted by a licensed mental health provider. This does not include athletic trainers or sports performance consultants who lack clinical licensure. Licensed practitioners may include:
        - Clinical or counseling psychologists.
        - Psychiatrists.
        - Licensed clinical social workers.
        - Psychiatric mental health nurses.

        - Licensed mental health counselors.
        - Primary care physicians with core competencies to treat mental health disorders.
- **Administration.** Every NCAA athletics department has an assigned Athletics Health Care Administrator, whose role is to share and monitor NCAA health and safety-related legislation, interassociation recommendations and resources. Additionally, head team physicians manage care coordination between the student-athlete's medical team (athletic trainers, sports medicine staff, nutritionist, team doctor, and mental health clinician), as well as coordination with other support staff across campus (e.g., student health services, student affairs).

Strategies for optimizing the education provided to student-athletes about mental health

The NCAA recommends that collegiate student-athletes receive education related to mental health on an annual basis, with the goal of increasing mental health literacy and encouraging help seeking (ref: Interassociation Best Practices).

Campus counseling staff are well positioned to provide such information to teams, meeting a need for accurate and sensitively delivered mental health education in sport settings. Some sport-specific considerations about doing so are outlined below.

- **Address team norms.** If providing education to a team, it is important to consider team norms – are they supportive of mental health help seeking? Are they reinforcing unhealthy stigma that interferes with help seeking? Unhealthy and stigmatizing norms need to be challenged, and where they are based on inaccurate information, corrective information provided in a nonthreatening manner. Helping student-athletes communicate with each other about the behaviors that they value as a team – for example, looking after their health so they can perform their best – can help shift norms in a healthy direction and reduce perceptions of teammate stigma.
- **Engage coaches.** Coaches care about student-athlete health and well-being and play an important role in promoting help-seeking behaviors. Helping coaches communicate effectively with student-athletes in support of mental health help seeking can increase willingness to seek help. In the pages that follow, coach-specific messaging about a range of mental health concerns are provided. Additional information for coaches is available through Coaches Assist or www.ncaa/mental-health/coach).
- **Train peer health educators.** Reach out to student-athletes to make them aware of the existing peer health education services available on your campus. Train student-athletes to serve as peer educators, whether as part of existing campus health peer education groups, or as a separate group that focuses specifically on student-athlete health and safety issues. (refer to the Student-Athlete Mentor resource in the interdisciplinary team planner at www.ncaa.org/mentalhealth).
- **Encourage positive bystander behaviors.** Team members are used to looking out for each other. Talking about how teammates can help recognize and refer each other to mental health care services gives everyone a role in mental health

promotion. While this conversation does not have to exist within formal programming, there are existing resources that may be helpful. For example, if your campus does not already sponsor the NCAA supported Step UP! bystander intervention resource (www.stepupprogram.org), consider working with the athletics department to bring this evidence-informed programming to student-athletes. This program is fully scripted and provides resource materials to train student-athletes in peer intervention and can be tailored to address mental health-related concerns.

Suggestions for strengthening collaboration with athletics

- **Find a "champion"** or interested party in athletics who will work with you in providing services to student-athletes, with a common goal of serving and promoting student-athlete mental health. All athletics departments have an Athletics Health Care Administrator (often the Head Athletic Trainer) with designated responsibility for compliance to health and safety policies, best practices, and legislation. Many athletics departments also have a designated life-skills coordinator, whose primary responsibility is to assist student-athletes in leading a balanced life including academic achievement, athletic success and personal wellbeing. These individuals may be natural collaborators for your efforts.
- Identify **common ground, i.e., those goals shared by all campus departments**. For example: health and development of all students, promotion of positive behaviors, compliance with institutional policies or legal considerations. The mission of higher education, and therefore the mission of collegiate athletics is the human growth and development of students.
- If possible, attend games and **demonstrate an interest** in student-athlete success on and off the field of play.
- **Engage athletic trainers.** These allied health professionals are most often the point person for providing health related information and health care to student-athletes. Most athletic trainers work with one or two teams per season and most sports medicine departments have a head athletic trainer. If possible, contacting athletic trainers during the summer before fall sports teams return to practice may be helpful if you wish to arrange a time to meet.
- Learn how to **tailor your messaging for the unique priorities** and stressors that student-athletes experience, such as time demands of practice, travel and competition, and health and safety-related risk factors.
- **Emphasize the benefits of health promotion** initiatives for helping student-athletes perform at their best on and off the field of play. This could include discussing how untreated mental health symptoms and disorders (e.g., substance use disorder) could negatively impact performance and/or how mental health care seeking can help student-athletes thrive, independent of their underlying pathology.

Section 2: Athlete-relevant information for clinicians about mental health concerns

SUBSTANCE USE

Alcohol use is common among college student-athletes: 77% reported using alcohol in the past year, 42% of all student-athletes reported heavy episodic drinking (i.e., drinking 4+ drinks in a row for females or 5+ for males), and 18% of males and 3% of females reported extreme drinking (i.e., drinking 10+ in a row). Self-reported marijuana use is lower among student-athletes (25% use by inhaling or ingesting) than the non-athlete college population (33%). Although college student-athletes use cigarettes (11%) and smokeless tobacco (13%) at a lower rate than the non-athlete college population, the prevalence is still concerning. The overall use of NCAA banned substances is around 3% across all student-athletes.

Risk factors in the sport environment

- **Team norms.** Heavy drinking may be normative on some teams. When a group is highly cohesive—something that is very often the case on college sports teams—group norms are strongly predictive of behavior.
- **Attempted performance enhancement.** Student-athletes often look for a way to get an edge in their performance. There are many healthy, safe, and legal ways to increase performance. However, some student-athletes may believe that certain drugs, such as stimulants, can help their performance. Not only is illicit use of many of these substances considered cheating, but these substances may also be harmful to health, particularly in the case of non-medically monitored stimulant use.
- **Fear of punishment**. Some student-athletes may be resistant to seek help for fear of punishment for NCAA violations. Student-athletes are subject to NCAA regulations that relate to the use of some substances. NCAA banned drug policies are in place to protect health and safety and the integrity of the game. (see www.ncaa.org/drugtesting for NCAA drug testing policies.)
- **Anxiety management.** Student-athletes may have heightened time demands compared to non-athlete students. It is not uncommon for student-athletes to feel overwhelmed by these demands and to use substances as a way to manage this anxiety or related sleep disturbances (NCAA Student-Athlete Substance Use Study).
- **Pain management**. Many student-athletes feel pressure to play through psychological and physical pain. Some continue to play with an injury to hold on to a scholarship. NCAA regulations exist to preserve the health of its athletes, as well as strategies to monitor and treat pain while decreasing opioid use in student-athletes. However, there are multiple reasons student-athletes may turn to drugs, including using them to improve their athletic performance, to cope with academic and social pressures, or to help treat injuries. Most do not turn to drugs out of the simple desire to impress others, but instead become unintentionally addicted after being introduced to these prescription drugs after sustaining painful injuries.

Athletic performance consequences of substance use:

<u>Alcohol</u>
Physical Health:

- Consuming five or more alcoholic beverages in one night can affect brain and body activities (e.g., memory, decision-making, and athletic performance) for up to three days. Two consecutive nights of drinking five or more alcoholic beverages can affect brain and body activities for up to five days.
- Alcohol use inhibits absorption of nutrients by damaging the cells lining the stomach and intestines and disabling transport of some nutrients into the blood.
- The acute use of alcohol can influence motor skills, hydration status, aerobic performance, as well as aspects of the recovery process.
- The cumulative effects of binge drinking episodes may leave a student-athlete unable to perform at the expected or desired level.

Mental Health:

- Alcohol use inhibits the ability to learn new information. Specifically, alcohol compromises the hippocampus, which is the part of the brain that is vital to the formation of new memories.
- Regular use of alcohol changes the chemistry of the brain, including decreasing the level of serotonin, which is a key chemical in modulating depression.
- Alcohol use can lead to dehydration, insomnia, higher injury rates, slower injury healing, impaired psychomotor skills, hangovers, accidents, lateness, missing important obligations, reduced metabolic recovery/glycogen re-synthesis, impaired thermoregulation, weight gain, and academic underperformance that can threaten athletic eligibility.

Sleep:

- Even one alcoholic beverage can disrupt restorative sleep. Without adequate sleep, our bodies do not produce enough human growth hormone. This will decrease the body's ability to repair itself following from training and competition.
- The most immediate effects of lack of sleep on athletic performance are impaired cognition, including the inability to remember plays, and poor focus at game time.

<u>Marijuana</u>
Physical Health:

- The primary psychoactive component of marijuana is tetrahydrocannabinol (THC). In varying concentrations, THC is present in various marijuana-related products including raw plant materials, infused edible formulations, and potent cannabis extractions.
- Smoking marijuana impairs cognition, and psychomotor and athletic performance. Marijuana can slow reaction time, distort sensory perception, impair both motor and eye-hand coordination, increase heart rate, impair learning and memory, increase anxiety and in some cases cause panic attacks and psychoses.

- The effects of marijuana on sport performance are much like those of alcohol, including acutely impaired psychomotor skills and cognitive function.
- Marijuana use, whether inhaled or ingested as edibles such as brownies, cookies, or gummies is linked to multiple negative outcomes, including addiction, insomnia, anxiety, and nausea.

Mental Health:

- Marijuana can lead to a variety of acute effects, including impaired short-term memory; impaired attention, judgment, and cognitive function; impaired coordination and balance; increased heart rate; and anxiety, paranoia, or psychosis. All of these effects endanger student-athlete safety and impair academic and athletic performance.
- Long-term effects of chronic marijuana use include impaired learning, poor coordination, and disordered sleep, all of which can further endanger a student-athlete.
- Marijuana can also produce dysphoric reactions, including severe anxiety and panic disorders, paranoia, and psychosis.

Sleep:

- Persistent marijuana use can lead to sleep problems., it also diminishes alertness, and has relaxing and sedative properties, which can be dangerous, especially immediately before or after competition.

Stimulants

Physical Health:

- Misuse of stimulant-type substances such as amphetamines, cocaine, ephedrine, and medication for ADHD can have negative athletic performance consequences.
- The individual may become nervous or jittery, which can negatively affect any skill requiring fine motor coordination and concentration.
- Performance can also be negatively affected by increased heart rate and blood pressure as well as increased core temperature.

Mental Health:

- Student-athletes who use illicit stimulant drugs are twice as likely to suffer from mood and anxiety disorders, with the reverse also true.
- Some student-athletes may take prescribed stimulant medication for disorders such as ADHD, in which case it is very important for the athlete to follow physician instructions.
- Chronic use of some stimulant drugs can lead to both short- and long-term changes in the brain, which can lead to mental health concerns including paranoia, depression, anxiety, aggression, hallucinations, and other problems, all of which can negatively affect athletic performance.
- Many student-athletes who use stimulant drugs are diagnosed with other mental health.

Sleep:

- Student-athletes who use illicit stimulant drugs take much longer to fall asleep than non-users, resulting in low quality sleep and weakened athletic performance.
- Simulant drug users experience much less deep sleep than student-athletes who do not use the drug. When sleep deprived, their reaction time is slowed and their immune system is compromised.

Student-athlete specific considerations for clinicians about substance use:

- Educational programming for student-athletes must consider timing issues, such as differences in alcohol use in the off-season compared to the competitive season.
- Provide clinical support and education to student-athletes for underlying issues that may drive substance use. For example, in some settings it may be appropriate to address the culture that encourages student-athletes to "push through no matter what," which could lead them to ingest alcohol or other substances to mask pain.
- Engage coaches in messaging, policy development and education, including messages about expectations, health and performance issues, and intervention programs about the risks association with alcohol and other drug use.
- It is important to monitor substance use for clinically significant presentation that may lead to a diagnosis of a particular substance use disorder (e.g., overuse of alcohol begins to impact the student's performance abilities and results in expulsion from the team).

Additional resources:

- Substance Abuse Prevention Toolkit
- Alcohol and Athletic Performance, and visit the NCAA Student-Athlete Substance Use Study.
- BJSM consensus and sub-specialty papers

DISORDERED EATING and EATING DISORDERS

Dieting is an important risk factor for disordered eating and eating disorders. Disordered eating occurs on a continuum from dieting and restrictive eating, abnormal eating behavior, and finally clinical eating disorders. Approximately 25% of student-athletes exhibit symptoms of disordered eating, and a small percentage of those progress to eating disorder. Female student-athletes have a higher prevalence of disordered eating by approximately 14% to 19% compared to their male counterparts. or this group, the cause of starting to diet is related to perceived performance improvements, and sociocultural pressures for an ‘‘ideal’’ body. Student-athletes most at risk for disordered eating are those involved in sports emphasizing a thin body size/shape, a high power-to-weight ratio, and/or sports utilizing weight categories, such as in some high-intensity sports.

Risk factors in the sport environment

- **Sport demands.** Disordered eating or eating disorders can occur in all sports, but are more prevalent in sports where there are aesthetic (e.g., gymnastics), gravitational (e.g., running) or weight class (e.g., rowing, wrestling) demands.
    At the other end of the weight spectrum, student-athletes who participate in sports that reward having a large body, such as certain positions in football, may face difficulties in managing their weight and moderating their eating when transitioning out of sport.
- **Team or sport norms.** Observed eating and exercise behaviors of teammates and competitors, and pressure (real or perceived) from coaches and teammates can influence weight-related behaviors.
- **Revealing uniforms.** A uniform can be “revealing” based on the amount of skin revealed or how tightly the uniform conforms to the body. Such a uniform can increase body consciousness and body dissatisfaction, which in turn can increase the risk of unhealthy dieting and disordered eating symptoms.

Over-adherence to a “good athlete” ethos. Perfectionism and the desire to be a "good athlete" can lead to over-exercising, the development of rigid rules related to "healthy and unhealthy" foods, and restrictive eating patterns.

Athletic performance consequences of disordered eating and eating disorders

Physical Health:

- Behaviors such as vomiting, excessive exercise, and restricting carbohydrates often leads to dehydration, which can compromise performance. If these behaviors become repetitive and begin to impact performance, they warrant a formal evaluation to assess for eating disorder.
- Inadequate nutrition disrupts hormonal balance (and regular menses in women) and can lead to decreased bone density and an increased risk of injuries, including stress fractures.
- Over a period of time, female student-athletes move along on a continuous spectrum ranging from the healthy student-athlete with optimal energy

availability, regular menses and healthy bones to the opposite end of the spectrum characterized by amenorrhea, low energy availability and osteoporosis. An underlying concern of disordered eating and eating disorders is an inadequacy of energy to support the range of body functions involved in optimal health and performance

Mental Health:

- Student-athletes who engage in disordered eating behaviors or who exhibit eating disorder symptoms are often anxious and obsessed with eating, food, and weight. This will lead to a decreased ability to concentrate on other things, including their academic obligations and athletic performance.
- Depression and depressive symptoms could be associated with disordered eating, and are also highly comorbid with eating disorders, which could lead to changes in dedication to their sport or performance during competition.

Sleep:

- Sleep is disrupted when a person is not consuming an adequate amount of caloric energy during the day. This can be related to increased anxiety.
- Student-athletes who have eating disorder diagnoses report insomnia, excessive daytime sleepiness and other sleep disorders like sleepwalking or sleep paralysis much more frequently, which can all affect energy levels and athletic performance.

Student-athlete specific considerations for clinicians about disordered eating behaviors or eating disorders

- Self- or coach-referral for early onset of eating disorder concerns may be challenged due to the presumption of health based on good athletic performance. Pre-emptive team and coach education about the signs of disordered eating and the consequences of untreated disordered eating may help encourage earlier referral and care seeking.
- Whether in therapy with student-athletes, or as part of educational engagement with teams and coaches, focus on ways for student-athletes to enhance their performance that don't involve weight (e.g., strength training and mental/emotional skills) and the importance of nutrition and staying injury-free for optimal athletic performance.
- Recognize that the body composition and training required for optimal health and performance are not identical for all student-athletes.
- Once disordered eating has been recognized or an eating disorder has been diagnosed, a knowledgeable and experienced multidisciplinary team of healthcare professionals should care for the student-athlete, with the goal of personalized, patient-centered care.
    - This healthcare team often consists of a mental health clinician, dietician, and physician, depending on what is available on a college campus. Many college counseling centers refer out student-athletes who need support for eating disorders. Thus, it is important to be familiar with referral sources in your local community.

- Seek out the services of a certified sports dietitian to prescribe appropriate nutrition for optimal sport performance. Some sports medicine departments or athletics departments engage the services of a certified sports dietitian on a full-time or part-time basis.
- The student-athlete affected by disordered eating or an eating disorder must feel like he or she is receiving a cohesive and consistent message from their healthcare team, within and outside of athletics. Building strong relationships with the athletics healthcare team can help facilitate this cohesive messaging.

Learn more:

- Mind, Body and Sport: Eating Disorders
- NCAA Managing the Female Athlete Triad
- IOC Consensus Statement providing guidelines to guide risk assessment, treatment, and return-to-play decisions.

MAJOR DEPRESSIVE DISORDER AND DEPRESSIVE SYMPTOMS

Recent estimates suggest that approximately one in four (24%) student-athletes experienced clinical symptoms of depression.

Student-athletes with major depressive disorder (MDD) experience depressed mood and/or little interest or pleasure from activities on most days over at least a 2-week period, in addition to associated physical, psychological and cognitive symptoms. A diagnosis requires at least five symptoms and a negative impact on functioning, but student-athletes may also experience depressive symptoms without meeting the criteria for MDD.

Risk factors in the sport environment

Although most depressive symptoms occur for reasons unrelated to sport participation, for some student-athletes there can be risk related to their participation in sport. These can include:

- **Psychological response to injury or the end of an athletic career.** The student-athlete's self-esteem and identify may be negatively affected by their inability to do the thing they may do best and enjoy most – playing their sports. This risk is especially high for student-athletes who experience sudden or forced transition out of sport.
- **Overtraining.** Depressive symptoms sometimes follow heavy training and can include physical and psychological symptoms. The decrease in performance as a result of those symptoms can further lead to depressive symptoms. Clinically, it is important to remember that college student-athletes may present with sport-related issues that could make it more difficult to tailor therapeutic interventions. These issues can include diagnostic challenges (e.g. overtraining syndrome vs major depression); aggression; narcissism; and entitlement.
    - **Overtraining syndrome** is a condition in which a student-athlete experiences fatigue and declining performance in sport despite continuing or increased training. This can result in mood changes, decreased motivation, frequent injuries and even infections. Although similar to Major Depressive Disorder, OTS symptoms are multisystemic and result from underlying hormonal, immunologic, neurologic, and psychologic disturbances, and are in response to excessive exercise without adequate rest.

Athletic performance consequences of depressive symptoms

Physical Health:

- For some student-athletes, symptoms of depression will include a constant sense of fatigue, loss of interest in activities that were previously enjoyed, and loss of confidence.
- It is possible that for some student-athletes these changes could negatively impact athletic performance.

Mental Health:

- Overreaching and overtraining should be considered as possible relevant factors in student-athletes who present with depressive symptoms.
- Depressive symptoms and MDD may result in adverse effects on the student-athlete's social life.
- MDD and depressive symptoms are highly associated with suicide and suicidal ideation.

Sleep:

- Depressive symptoms may include fatigue or insomnia, which can lead to a decline in split-second decision-making and decreased accuracy, both necessary for optimal sport performance.

Student-athlete specific considerations for clinicians about depressive symptoms

- Be aware of how symptoms of depression might present uniquely among student-athletes and avoid the presumption that student-athletes are at decreased or minimal depression risk.
- Recognize that sport may function differently for different student-athletes. For some, sports can provide a sense of identity, a source of self-esteem, and a sense of accomplishment. For others, it may increase the student-athlete's symptoms of depression.

Learn more:

- Mind, Body and Sport: Mood disorders and Depression
- Mind, Body and Sport: How being injured affects mental health
- www.ncaa/mental-health/coach
- IOC consensus and sub-specialty papers

ANXIETY SYMPTOMS and ANXIETY DISORDERS

Anxiety symptoms are among the most common psychiatric concerns in student-athletes. However, it is important to recognize the difference in situational anxiety such as experiencing a traumatic championship loss, versus the ongoing and persistent symptoms of an anxiety disorder such as post-traumatic stress disorder. Recent estimates suggest that approximately 33% student-athletes experienced clinically significant symptoms of anxiety during the school year, compared to 15% of their non-athlete peers.

Risk factors in the sport environment

- **Elevated stress.** For some student-athletes, stressors may be elevated due to excessive time demands, inadequate sleep, and pressure to perform athletically. For student-athletes without appropriate support networks, coping skills, and among those who have underlining biological vulnerability, these stressors may contribute to clinically significant symptoms of anxiety.
- **Transition to college sport.** Similar to their non-athlete peers, student-athletes often experience challenges transitioning into university academics, and living in a new environment away from former support systems, with the added stressor of acclimating to the heightened competitive and time demands of their sport.
- **Athletic pressures.** Some student-athletes who do not meet criteria for a generalized anxiety disorder may experience athletic performance-related anxiety. It is worth noting that some degree of anxiety is natural/typical and even helpful for student-athletes, but persistently elevated levels are unhealthy.
- **Coaching style.** When a coach uses punishment excessively (for example, yelling or exercise as punishment), some student-athletes may experience problematic increases in anxiety.

Athletic performance consequences of anxiety symptoms or anxiety disorders
Physical Health:

- All student-athletes experience normal anxiety in response to a stressor, such as a championship game, or a tough practice. Many student-athletes are anxious before a game, but a student-athlete with an anxiety disorder might be anxious for several weeks beforehand, and may experience intense symptoms before and during the competition.
- Normal anxiety for a student-athlete is fleeting, while an anxiety disorder is ongoing and the feelings can last weeks to months.
- Anxiety disorders are different from anxiety symptoms because the distress they cause can keep a student-athlete from carrying on with their normal life. Types of disorders include: Generalized Anxiety Disorder (GAD), Obsessive-Compulsive Disorder (OCD), Panic Disorder, Post-Traumatic Stress Disorder (PTSD), or Social Anxiety Disorder.
- When individuals suffering from anxiety symptoms or an anxiety disorder experience a situation that they consider to be threatening, they may experience symptoms such as increased heart rate, rapid breathing, sweating, trembling, and feeling weak or tired.

- Student-athletes experiencing these symptoms may have diminished ability to execute on the athletic field.
- Student-athletes who experience athletic performance-related anxiety may find that it compromises their ability to perform at their best.

Mental Health:

- Anxiety disorders can negatively affect concentration, primarily through distraction by physical and psychological symptoms.
- Some student-athletes with anxiety symptoms and disorders "self-medicate" with alcohol, marijuana, or other substances, which can have a negative impact on performance.

Sleep:

- Anxiety may cause sleep problems or exacerbate existing sleep problems.
- Elevated anxiety symptoms are associated with short sleep and/or extended sleep.
- It may be difficult to determine which issue came first: anxiety causes sleeping problems, or sleep deprivation causing an anxiety disorder.

Athletic-specific considerations for clinicians about anxiety symptoms and anxiety disorders

- Different student-athletes will respond differently to the same stressors. Student-athletes with anxiety symptoms are less able to manage their anxiety in sport and non-sport activities properly and positively. They are often tired or even exhausted by their symptoms and are looking for some relief.
- Be aware of how symptoms of anxiety or anxiety disorders may manifest uniquely in the sport setting. For example, student-athletes with symptoms of anxiety may develop behavioral symptoms such as avoidance of feared situations or subtle avoidance. A basketball player who is anxious about physical contact might avoid driving to the hoop. Subtle avoidances on the basketball court could include removing themselves from play, zoning out during the huddle, and speaking softly or evading eye contact when speaking with the coach. Further, a student-athlete with an anxiety disorder may begin missing practice, missing games, or quit the team abruptly.

Learn more:

• Mind, Body and Sport: Anxiety Disorders

BJSM articles (consensus and sub-specialty paper)

SLEEP

Nearly half (42.4%) of student-athletes are poor sleepers, meaning low sleep quality, sleep duration, and substantial levels of daytime sleepiness. One-third of student-athletes report sleeping fewer than 7 hours per night. Compared with non-athletes, student-athletes tend to sleep less and the quality of their sleep is poorer. There is a bidirectional relationship between sleep and mental health, making it both a risk factor and an important signal that a student-athlete may require further evaluation and support.

Risk factors in the sport environment

- **Athletic scheduling.** Inconsistently scheduled practices, travel, and competition can interfere with the ability of student-athletes to establish regular sleep patterns.
- **Evening exercise.** Intense exercise in the evening can interfere with sleep. Some teams may have practices scheduled later in the evening.
- **Early morning practices.** Many teams have early morning practices before class is in session.
- **Time demands.** The combination of athletic and academic time demands can decrease sleep opportunity. Training schedules, available practice times, lengthy travel to competitions, and jet lag can all impact the quality and quantity of sleep for a student-athlete.
- **Post-game socializing.** Sleep after a practice or game is critical for consolidating benefits from the effort and repairing the body. A “work hard, play hard” mentality may result in student-athletes engaging in social events following an athletic performance that compromise sleep.

Athletics performance consequences of inadequate sleep

Physical Health:

- Increased risk of and decreased ability to recover from injury and illness.
- Inability to bring full physical effort to practice and training.
- Impaired daytime functioning, and frequent need to take naps.
- Decrease in ability to maintain optimal reaction time, alertness, and athletic performance.
- Pervasive worries or fears that impact athletic performance.

Mental Health:

- Difficulty learning and retaining new information including sport related learning.
- Decreased ability to regulate emotions, which can result in greater irritability and impulsivity.
- Increased instance of suicide and suicidal ideation.
- Increased risk of eating disorder.
- Other mental health symptoms and disorders such as depression may coexist.
- Panic attacks triggered by certain training or competitive situations.
- Increased risk of alcohol or substance use disorders; may find that alcohol or other substances can make their anxiety symptoms worse.

Student-athlete specific considerations for clinicians about sleep.

- Screen student-athletes for insufficient sleep; consider working with the athletics department to implement universal screening of student-athlete sleep.
- Keep in mind that sleep problems often co-occur with clinical mental health disorders.
- When working with student-athletes to address poor sleep, pay close attention to how athletic time demands, including travel, influence sleep patterns and sleep opportunity. Addressing some of these barriers to sleep may require coach-level decision making. A strong partnership with the athletics department can help facilitate conversations with coaches about making team decisions to improve student-athlete sleep.
- Communicate to student-athletes and coaches about how chronically restricted hours of sleep has important implications for potential injury, accurate concussion assessment, and susceptibility to infectious illness.

Learn more:

• Mind, Body and Sport: Sleep Disorders
• Stanford Sleep Study
• BJSM articles (consensus and sub-specialty paper)

WHERE can I learn more?

1) “Mind, Body and Sport”: NCAA publication includes personal narratives; articles on student-athlete depression, anxiety, eating disorders, substance abuse, gambling and sexual assault; expanded information on the influence of sport-specific stressors on student-athlete mental health; roles and responsibilities of sports medicine staff and coaches; models of service; and NCAA resources and policies.

2) Inter-Association Consensus Document: Mental Health Best Practices for Understanding and Supporting Student-Athlete Mental Health. The Mental Health Best Practices was developed and endorsed by twenty-five of the most prominent mental health, medical, higher education, and sports medicine organizations in the nation and was designed to offer resource-independent recommendations for member schools to support and promote student-athlete mental wellness in partnership with campus stakeholders.

3) Addressing the multifaceted aspects of mental health symptoms and disorders in elite athletes, the International Olympic Committee (IOC) has published a consensus paper (Mental Health in Elite Athletes: International Olympic Committee Consensus Statement (2019)) plus 12 sub-specialty papers.

Additional resources are available at:

- **www.ncaa.org/mentalhealth**
- IOC Consensus Statement
- 12 Subspecialty Papers from IOC Consensus document

Further Reading

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APPENDIX B

RECRUITMENT EMAILS

Email 1: "Licensed clinicians needed for an important study!"

To be sent: July 6, 2020

Dear [*insert name*],

My name is Lindsey Sanders, MSW, LCSW. I am a doctoral student at the University of North Carolina at Greensboro working under the direction of Dr. David Wyrick, a faculty member in the department of Public Health Education. **If you are a licensed clinician who works with college students, I need your help.**

For my dissertation, I am exploring mental health care provided by university counseling center clinicians. Information from this research study will be used to inform future programming delivered to clinicians who work with diverse student populations. Your expertise is invaluable and I need your help to ensure that the results are representative of clinicians like you.

Please click on the link below to access the survey. << include link to Dissertation Survey>

It will take approximately 10-15 minutes to complete the survey. The survey will remain open until August 5. After you complete the survey, **you will have the opportunity to win one of ten $50 Visa gift cards!**

If you have any questions about this study, please contact me at ldsander@uncg.edu.

Thank you very much.

Sincerely,

Lindsey Sanders, MSW, LCSW

Email 2: "Your help is still needed – survey of licensed clinicians"

Date: July 20, 2020

[Insert name],

Thank you to everyone who has already completed our clinician survey! We have had great responses so far.

If you have not had time to do so yet, please complete this brief 10-15 survey of licensed clinicians who work with college students. The results will be used to develop programs that support clinicians in their work with diverse student populations. We really need your help to make sure that our survey represents providers like you.

<< include link to Dissertation Survey>>

Remember, by completing the survey, you are eligible to win one of ten $50 Visa gift cards!

Thanks so much for your help,

Lindsey Sanders, MSW, LCSW

Email 3: "Last chance – please complete survey of licensed clinicians!"

Date: August 3, 2020

[Insert name],

Thank you so much to everyone who has completed our clinician survey. We have gotten great responses and look forward to hearing from as many providers as possible.

Time is running out, though. If you have not had time to complete your survey yet, please take the next 10-15 minutes to share your thoughts. The survey closes next week (on Wednesday, August 5).

By completing the survey, you are eligible to win one of ten $50 gift cards!

Thanks so much for your help,

Lindsey Sanders, MSW, LCSW

<< include link to Dissertation Survey>>

APPENDIX C

REQUEST FOR FUNDING FOR INCENTIVES

Request for Funding Support for Incentives to Dissertation Study Participants
July 8, 2020

Study Title: The Role of Cultural Competency in the Provision of Clinical Mental Health Care for Collegiate Student-Athletes

By Lindsey D. Sanders, MSW, LCSW

BA, University of North Carolina at Chapel Hill, 2001
JMSW, North Carolina A&T State University, 2012
JMSW, University of North Carolina at Greensboro, 2012
North Carolina Social Work Certification & Licensure Board, #C010337

Committee Chair: David Wyrick, PhD
Emily Kroshus, ScD
Michael Perko, PhD
Jay Poole, PhD
Kelly Rulison, PhD

Submitted to the University of North Carolina at Greensboro
School of Health and Human Sciences
Dr. David Demo, Associate Dean for Academic Administration

Dissertation Funding for Participation Incentives		
Department of Public Health Education Offer of Support		$250.00
Request for Support from HHS		$250.00
Total Incentive Offered in Study (10 VISA gift cards x $50):		**$500.00**

Purpose of Study

According to The National Collegiate Athletic Association (NCAA) there are over 460,000 student-athletes who compete in 24 different sports nationwide. While intercollegiate athletics provides a unique environment allowing young adults to explore athletic and academic pursuits, many student-athletes find this experience challenging and struggle with the cultural demands of a rigorous mental and physical environment. Failure to navigate this experience has the potential to negatively impact student-athletes' psychological well-being.

In recent years, the NCAA has openly recognized that mental health concerns are serious in intercollegiate athletics. Along with new regulations, the NCAA has, and continues, to raise awareness of student-athletes' mental health needs, requiring member NCAA institutions to create and implement mental health protocols that include access and/or referral to licensed mental health professionals. Researchers and sport psychology professionals have long called for in-house mental health services within Division 1 intercollegiate athletics. However, when mental health services are not provided "in-house" student-athletes may encounter barriers when seeking services independently.

Research has explored athletic directors' and coaches' perceptions and preferences in regards to sport psychology professionals. However, there is no existing

literature that explores university counseling center clinicians' empathy, self-efficacy, knowledge, and attitudes toward providing mental health and clinical sport psychology services to student-athletes. The purpose of this study is to investigate factors that predict athletics cultural competency among university counseling center clinicians and their intentions to be culturally responsive when providing clinical mental health care to collegiate student-athletes.

The purpose of this study is to examine the role of mental health clinicians' athletics cultural competency in the provision of clinical mental health care for collegiate student-athletes within university counseling centers. The primary goal of the study is to investigate whether demographic differences exist in a clinician's level of empathy, self-efficacy, knowledge, and attitudes toward treating student-athletes with mental health concerns. Further, we hope to learn to what extent empathy, knowledge, self-efficacy, and attitudes are associated with university counseling center clinicians' intentions to provide culturally competent clinical services to student-athletes who have mental health concerns.

Study Design

This study is a one-group survey design that targets a convenience sample of university counseling center clinicians.

Sampling and Recruitment

Participants in this study are mental health clinicians who work on college or university campuses. A convenience sample will be drawn from listservs of counseling and psychology professional organizations. Based on this compilation of email addresses for university counseling centers and affiliated mental health clinicians,

clinicians will be invited to participate in the study via email. To make it more accessible, clinicians will complete the survey online, using a computer, tablet, or smartphone.

For this study, eligible clinicians (a) are currently working as a mental health service provider on a college or university campus with licensure in clinical psychology, clinical social work, counseling, or psychiatry, and (b) are available for a referral for services for a student-athlete. These clinicians may be located in a variety of campus departments, including but not limited to: counseling centers, student health services, and athletics.

For completion of the survey, participants will be entered into a drawing to win one of 10, $50 Visa gift cards. All procedures were approved by UNC Greensboro's Institutional Review Board.

APPENDIX D

SURVEY VARIABLES

Variable	Description	Scale
Demographics	Participants were asked to provide personal information such as highest degree achieved; type of clinical license; affiliation with professional organizations; how many years in clinical practice; which department(s) on campus they report to; and, percent of student-athletes on their caseload	These items were adapted from previous measurements of health care providers' cultural competency specific to their population of interest (Marra et al., 2010; Schim et al., 2003).
Empathy General	Items to measure a clinician's general empathy were adapted from the Interpersonal Reactivity Index (Davis, 1980) and the Toronto Empathy Questionnaire (Spreng et al., 2009).	Sixteen items were answered on a 5-point Likert scale assessing how often the statements were true for the participants, ranging from "Rarely" to "Almost always." High scores indicated higher levels of participant empathy.
Empathy specific to student-athletes	For this study, nine items that measure empathy were adapted from the IRI and TEQ. A second scale was designed to measure a participant's empathy specific to student-athletes, using a similar adaptation of the IRI and TEQ.	This athlete-specific scale included six items measured on a 5-point Likert scale ranging from "Rarely to "Almost always." High scores indicated higher levels of participant empathy specific to student-athletes.
Self-efficacy General	The items used to measure a participant's self-efficacy were adapted from the Self-Efficacy Formative Questionnaire (Erickson & Noonan, 2018) and the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995).	For this study, the scale we designed to assess a participant's general self-efficacy adapted nine items from the Self-Efficacy Formative Questionnaire and the GSW. Participants were asked how well each item described them as a licensed clinician, ranging from "Not at all" to "Extremely

Variable	Description	Scale
		well." Higher scores indicated higher levels of general Self-Efficacy.
Self-efficacy specific to student-athletes	Six additional items were adapted to assess a mental health care provider's self-efficacy specific to student-athletes.	These items were answered on a 5-point Likert scale asking how well the statements describe them in their work with student-athletes, ranging from "Not at all" to "Extremely well." Higher scores were associated with higher levels of self-efficacy specific to student-athletes.
Knowledge	For this study, knowledge questions captured baseline knowledge to measure the extent to which participants have stored factual information in long-term memory and how well they can retrieve and respond with that information when asked a question about the culture of athletics. Items were designed based on the core constructs of the updated NCAA Stakeholders Guide, including: care coordination; alcohol and substance use; body image and disordered eating; anxiety; depression; sleep disorders; physical injury and NCAA policies.	These items were scored as "0" for incorrect responses, and "1" for correct responses. Thus, a participant with a higher score exhibited higher levels of knowledge about the culture of athletics.
Attitudes	Items to measure a participant's attitudes toward student-athletes were adapted from the Sport Attitude Survey (Yakut et al., 2016), and the Positive Thinking Scale (Diener et al., 2009). For this study, seven items were adapted from the SAS and PTS to measure a participant's attitudes toward the culture of athletics.	They were answered on a 5-point Likert scale asking participants to indicate how much they agree or disagree with each statement, ranging from "Strongly disagree" to "Strongly agree." Based on the scales from which our tool was adapted, higher scores indicate more positive attitudes.

Variable	Description	Scale
Intentions	Items to measure a participant's intentions to provide culturally responsive care to student-athletes were adapted from the Clinical Cultural Competency Questionnaire (Like, 2011).	Our survey presented participants with five items to be answered on a 5-point Likert scale asking participants how likely they are to do each, ranging from "Extremely unlikely" to "Extremely likely." Participants with higher scores were more likely to intentionally provide culturally responsive care to student-athletes.

APPENDIX E

SURVEY

Dissertation Survey

Start of Block: Welcome Page

Q2

Welcome! This study is exploring mental health care provided by university counseling center clinicians.

As a university counseling center clinician, **your expertise is invaluable**.

Your participation is completely voluntary. We expect that it will take less than 15 minutes for you to complete the survey. Please answer each question honestly. If you cannot answer a question honestly, please leave it blank. Your individual responses will not be shared with anyone. No one at your school or any professional organization will be able to identify who you are based on your answers.

If you participate, you will have the opportunity to be entered in a drawing to win one of ten $50 Visa gift cards.

Privacy and Confidentiality
We will not collect your name, IP address, or any other identifying information. We will store your data in a password-protected folder on a computer only accessible to the researchers. Data collected from this study may be shared with other researchers or used in future research studies, but because we will not collect any identifying information, there will be no way for someone to track your responses back to you.

How the Results Will Be Used
These data will be used as part of a doctoral dissertation. The data may also be shared in conference presentations or scholarly publications. Participants will not be identified in the data findings.

Contact Information
If you have questions, please contact Lindsey Sanders, MSW, LCSW, the doctoral student leading this study, at ldsander@uncg.edu or (336) 609-4846. You can also

contact Dr. David Wyrick, Professor in the Department of Public Health Education at UNC Greensboro, and the Founding Director & Chief Prevention Office at the Institute to Promote Athlete Health & Wellness at: dlwyrick@uncg.edu.

If you have questions about your rights in the research or if a problem or injury has occurred during your participation, please contact the UNC Greensboro Institutional Review Board at (336) 256-0253 or irbcorre@uncg.edu.

Q1 If you consent to participate in this study, please select “Yes” below.

- ○ Yes, I consent to participate in this study (1)
- ○ No, I do not consent to participate in this study (3)

Skip To: End of Survey If you consent to participate in this study, please select “Yes” below. = No, I do not consent to participate in this study

Q32 Are you a licensed clinician who works on a college or university campus?

- ○ Yes (1)
- ○ No (2)

Skip To: End of Survey If Are you a licensed clinician who works on a college or university campus? = No

End of Block: Welcome Page

Start of Block: Demographics

Q18 What is the highest degree you have achieved?

- ○ Bachelor’s (1)
- ○ Master’s (2)
- ○ PhD (3)
- ○ PsyD (4)
- ○ M.D. (5)
- ○ Other (6) _____

Q19 What type(s) of clinical licensure do you have?
Select all that apply.

- [ ] Licensed Professional Counselor (1)
- [ ] Licensed Clinical Social Worker (2)
- [ ] Psychologist (3)
- [ ] Psychiatrist (4)
- [ ] Other (5) _____

Q35 Which of the following professional organizations do you belong to?
Select all that apply.

- [ ] Alliance of Social Workers in Sports (5)
- [ ] American College Counseling Association (2)
- [ ] American Counseling Association (1)
- [ ] American Psychological Association (8)
- [ ] Big Sky Sport Psychology (6)
- [ ] Collegiate Counseling & Sport Psychology Association (7)
- [ ] National Association of Social Workers (4)
- [ ] Other (9) _____

Q34 How many **years** have you provided licensed, clinical mental healthcare in **any setting**?

- ○ Number of years (1) _____

Q30 How many **years** have you provided licensed, clinical mental healthcare in a **college/university setting**?

○ Number of years (4) _____

Q23 Administratively, which department(s) on campus do you report to?
Select all that apply.

- ☐ Academic Department (5)
- ☐ Athletics (4)
- ☐ Counseling Center (2)
- ☐ Student Health Services (1)
- ☐ Student Life (3)
- ☐ Other (6) _____

Page Break

Q32 Have you ever received cultural competency training, related to the various unique needs of your student population?

- Yes (1)
- No (2)

Skip To: End of Block If Have you ever received cultural competency training, related to the various unique needs of your... = No

Q33 In which of the following settings did you receive cultural competency training? Select all that apply.

- Certificate Program (2)
- Graduate School (1)
- Professional Development (3)
- Other (4) _____

End of Block: Demographics

Start of Block: Self-Efficacy - General

Q5 How well does each of the following statements describe you, as a licensed clinician?

	Not at all (1)	Slightly well (2)	Moderately well (3)	Very Well (4)	Extremely well (5)
I will succeed in my career as a mental health clinician. (1)	○	○	○	○	○
I can figure out anything in my clinical practice, if I try hard enough. (2)	○	○	○	○	○
Once I've decided to accomplish something that's important to my clinical growth, I keep trying to accomplish it, even if it's harder than I thought. (3)	○	○	○	○	○
I know how to handle unforeseen situations with students. (4)	○	○	○	○	○
My ability to be a good mental health clinician grows with effort. (5)	○	○	○	○	○
I can improve my basic level of clinical skills considerably. (6)	○	○	○	○	○
I can deal efficiently with unexpected events when students come into my office for mental health treatment. (7)	○	○	○	○	○
I can remain calm when facing difficulties with students. (8)	○	○	○	○	○
I can usually handle whatever comes my way in my clinical practice. (9)	○	○	○	○	○

End of Block: Self-Efficacy - General

Start of Block: Self Efficacy - Student-Athletes

Q35 We are interested in learning more about your experiences specifically working with **student-athletes**, and your thoughts about the needs of student-athletes.

Q21 If you know what association your school's athletic teams participate in, please indicate below.

- ○ Division I NCAA (National Collegiate Athletic Association) (1)
- ○ Division II NCAA (National Collegiate Athletic Association) (2)
- ○ Division III NCAA (National Collegiate Athletic Association) (3)
- ○ NAIA (National Association of Intercollegiate Athletics) (6)
- ○ NJCAA (National Junior College Athletic Association) (8)
- ○ NCCAA (National Christian College Athletic Association) (9)
- ○ Other (7) _____
- ○ I don't know (5)

Q27 Have you ever received training related to the unique needs of student-athletes?

- ○ Yes (1)
- ○ No (2)

Skip To: Q24 If Have you ever received training related to the unique needs of student-athletes? = No

Q31 In which of the following settings did you receive training related to the unique needs of student-athletes?
Select all that apply.

- ☐ Certificate Program (2)
- ☐ Graduate School (1)
- ☐ Professional Development (3)
- ☐ Other (4) _____

Q24 Approximately what **percentage** of your caseload is made up of student-athletes?

○ Percent (0-100) (4) _____

Page Break

Q26 Some of the following questions are similar to questions you have already answered, but they ask you to think about your work specifically with student-athletes.

How well do the following statements describe you in your work with **student-athletes**?

To make sure that our results are representative, we need everyone to answer these questions, even if you have no, or limited, experience working with ***student-athletes.***

	Not at all (1)	Slightly well (2)	Moderately well (3)	Very Well (4)	Extremely well (5)
I can deal efficiently with unexpected events with student-athletes. (1)	○	○	○	○	○
I know how to handle unforeseen situations with student-athletes. (2)	○	○	○	○	○
I can remain calm when facing difficulties with student-athletes. (3)	○	○	○	○	○
I will succeed in my clinical work with student-athletes who have mental health concerns. (4)	○	○	○	○	○
My ability to treat student-athletes who come into my office with mental health concerns grows with effort. (5)	○	○	○	○	○
I can improve my basic level of clinical skills to understand the unique needs of a student-athlete. (6)	○	○	○	○	○

End of Block: Self Efficacy - Student-Athletes

Start of Block: Empathy: athlete-specific

Q4 The following items relate to how your view your clinical skills specific to **student-athletes**.

*To make sure that our results are representative, we need everyone to answer these questions, even if you have no, or limited, experience working with **student-athletes.***

	Rarely (1)	Sometimes (2)	About half the time (3)	Often (4)	Almost always (5)
When a student-athlete is feeling excited, I tend to get excited too. (1)	○	○	○	○	○
I have tender, concerned feelings for student-athletes. (2)	○	○	○	○	○
I can tell when a student-athlete is sad, even when they do not say anything. (3)	○	○	○	○	○
I find that I am “in tune” with student-athletes’ moods. (4)	○	○	○	○	○
I am not really interested in how student-athletes feel. (5)	○	○	○	○	○
I find it difficult to see things from a student-athlete’s point of view. (6)	○	○	○	○	○

End of Block: Empathy: athlete-specific

Start of Block: Intentions - Student-Athletes

Q29 How likely are you to do each of the following?

*To make sure that our results are representative, we need everyone to answer these questions, even if you have no, or limited, experience working with **student-athletes**.*

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
To provide care to students from diverse campus groups or affiliations, including athletics. (1)	○	○	○	○	○
To tailor my counseling practices specifically to meet the needs of student-athletes. (2)	○	○	○	○	○
To be attentive to nonverbal cues that might have different meanings in athletics. (3)	○	○	○	○	○
To address treatment plan or care coordination compliance problems with student-athletes I treat. (4)	○	○	○	○	○
To apologize to student-athletes for misunderstandings about their needs. (5)	○	○	○	○	○

End of Block: Intentions - Student-Athletes

Start of Block: Attitudes

Q14 Please indicate how much you agree or disagree with the following statements:

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Student-athletes view themselves as very important people on my campus. (3)	○	○	○	○	○
Student-athletes feel they are entitled to special treatment by university authorities. (6)	○	○	○	○	○
Student-athletes are positive role models for young people. (2)	○	○	○	○	○
Playing sports helps build the character of young people. (1)	○	○	○	○	○
Many student-athletes feel they are above the rules on campus. (5)	○	○	○	○	○
When I see student-athletes prosper, I am happy for them. (7)	○	○	○	○	○
Student-athletes tend to commit more aggressive crimes than other students. (4)	○	○	○	○	○

End of Block: Attitudes

Start of Block: Knowledge

Q34 The next few items ask you some questions about your work with student-athletes.

*Even if you have never worked clinically with a **student-athlete**, please try to answer each question to the best of your knowledge.*

Q7 Which of the following people typically lead care coordination in an athletic setting, and may be a useful ally to mental health service provision (depending on student-athlete preferences related to confidentiality)?

- ○ Athletic Director (1)
- ○ Athletic Trainer (2)
- ○ Coach (3)
- ○ All of the above (4)

Q9 Marijuana use is _____ among student-athletes than among the non-athlete population.

- ○ Higher (1)
- ○ About the same as (3)
- ○ Lower (2)

Q8 What is the most common substance used by college student-athletes?

- ○ Adderall (4)
- ○ Alcohol (1)
- ○ Marijuana (2)
- ○ Steroids (5)
- ○ Tobacco (3)

Q10 All else equal, which of the following student-athletes is at the highest risk of developing an eating disorder?

- Women's Field Hockey (4)
- Women's Gymnastics (3)
- Men's soccer (1)
- Women's soccer (2)
- Men's Wrestling (5)

Q11 What is the most common psychiatric disorder for student-athletes?

- Anxiety (1)
- Depression (2)
- Eating Disorder (3)
- Sleep Disorder (4)

Q12 As defined by NCAA regulations, what is the maximum number of hours a week that student-athletes are allowed to spend on required athletic activities?

- Hours per week (5) _____

Q13 What psychological concern is most likely to lead to physical injury?

- Anxiety (1)
- Chronic sleep problems (4)
- Depression (2)
- Disordered Eating/Eating Disorders (3)

End of Block: Knowledge

Start of Block: Empathy - general

Q3 How often are the following statements true for you?

	Rarely (1)	Sometimes (2)	About half the time (3)	Often (4)	Almost always (5)
I have tender, concerned feelings for people less fortunate than me. (1)	○	○	○	○	○
I find it difficult to see things from other people's point of view. (2)	○	○	○	○	○
I get involved with the feelings and characters in a novel. (4)	○	○	○	○	○
When I see someone being taken advantage of, I feel protective towards them. (5)	○	○	○	○	○
I try to understand my friends better by imagining how things look from their perspective. (6)	○	○	○	○	○
I am effective in dealing with emergencies. (7)	○	○	○	○	○
I don't feel very sorry for other people when they are having problems. (3)	○	○	○	○	○
I believe that there are two sides to every question and try to look at them both. (8)	○	○	○	○	○
Before criticizing somebody, I try to imagine how I would feel if I were in their shoes. (9)	○	○	○	○	○

End of Block: Empathy - general

Start of Block: Additional Demographics

Q33 We have just a few more questions that will help us put your answers into context:

Q22
What type(s) of sports have you participated in?
Select all that apply.

- [ ] I never played sports (1)
- [ ] I never played organized sports, but enjoy(ed) playing sports with my friends (7)
- [ ] Youth club or recreation sports (2)
- [ ] Youth travel/AAU (8)
- [ ] High School (3)
- [ ] College/Club or Intramural sports (4)
- [ ] College/Intercollegiate (5)
- [ ] Professional (6)

Q16 Which gender do you most identify with?

- ○ Male (1)
- ○ Female (2)
- ○ Transgender Female (3)
- ○ Transgender Male (4)
- ○ Gender Variant/ Non-Conforming (5)
- ○ Other (6) _____
- ○ Prefer Not to Answer (7)

Q17 Which race do you most identify with? (Select all that apply)

- ☐ American Indian or Alaska Native (1)
- ☐ Asian (2)
- ☐ Black or African American (3)
- ☐ Hispanic or Latino (7)
- ☐ Native Hawaiian or other Pacific Islander (4)
- ☐ White (5)
- ☐ Other (6) _____

End of Block: Additional Demographics

Start of Block: End

Q25
Thank you for taking this survey!
Your experience is very important to our research!

You will now be taken to a separate page for a chance to win one of ten $50 Visa gift cards. We will not be able to link your contact information you provide with your answers on this survey.

End of Block: End

APPENDIX F

SURVEY ITEMS

	Source	Original Items	Survey Items	Scale
Empathy				
INTERPERSONAL REACTIVITY INDEX (IRI) Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 85.	Interpersonal Reactivity Index (IRI)	I daydream and fantasize, with some regularity, about things that might happen to me.		(1-5) Does not describe me well - Describes me very well
	Interpersonal Reactivity Index (IRI)	I often have tender, concerned feelings for people less fortunate than me.	GENERAL: I have tender, concerned feelings for people less fortunate than me. STUDENT-ATHLETE: I have tender, concerned feelings for student-athletes.	
	Interpersonal Reactivity Index (IRI)	I sometimes find it difficult to see things from the "other guy's" point of view.	GENERAL: I find it difficult to see things from other people's point of view. STUDENT-ATHLETE: I find it difficult to see things from a student-athlete's point of view.	

	Source	Original Items	Survey Items	Scale
	Interpersonal Reactivity Index (IRI)	Sometimes I don't feel very sorry for other people when they are having problems.	GENERAL: I don't feel very sorry for other people when they are having problems.	
Empathy				
	Interpersonal Reactivity Index (IRI)	I really get involved with the feelings and characters in a novel.	GENERAL: I get involved with the feelings and characters in a novel.	
	Interpersonal Reactivity Index (IRI)	In emergency situations, I feel apprehensive and ill-at-ease.		
	Interpersonal Reactivity Index (IRI)	I am usually objective when I watch a movie or play, and I don't often get completely caught up in it.		
	Interpersonal Reactivity Index (IRI)	I try to look at everybody's side of a disagreement before I make a decision.		
	Interpersonal Reactivity Index (IRI)	When I see someone being taken advantage of, I feel kind of protective towards them.	GENERAL: When I see someone being taken advantage of, I feel protective towards them.	
	Interpersonal Reactivity Index (IRI)	I sometimes feel helpless when I am in the middles of a very emotional situation.		
	Interpersonal Reactivity Index (IRI)	I sometimes try to understand my friends better by imagining how things look from their perspective.	GENERAL: I try to understand my friends better by imagining how things look from their perspective.	
	Interpersonal Reactivity Index (IRI)	Becoming extremely involved in a good book or		

	Source	Original Items	Survey Items	Scale
		movie is somewhat rare for me.		
	Interpersonal Reactivity Index (IRI)	When I see someone get hurt, I tend to remain calm.		
	Interpersonal Reactivity Index (IRI)	Other people's misfortunes do not usually disturb me a great deal.		
	Interpersonal Reactivity Index (IRI)	If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.		
	Interpersonal Reactivity Index (IRI)	After seeing a play or movie, I have felt as though I were one of the characters.		
	Interpersonal Reactivity Index (IRI)	Being in a tense emotional situation scares me.		
	Interpersonal Reactivity Index (IRI)	When I see someone being treated unfairly, I sometimes don't feel very much pity for them.		
	Interpersonal Reactivity Index (IRI)	I am usually pretty effective in dealing with emergencies.	GENERAL: I am effective in dealing with emergencies.	
	Interpersonal Reactivity Index (IRI)	I am quite often touched by things that I see happen.	I am quite often touched by things that I see happen.	
	Interpersonal Reactivity Index (IRI)	I believe that there are two sides to every question and try to look at them both	GENERAL: I believe that there are two sides to every question and try to look at them both.	

	Source	Original Items	Survey Items	Scale
	Interpersonal Reactivity Index (IRI)	I would describe myself as a pretty soft-hearted person.		
	Interpersonal Reactivity Index (IRI)	When I watch a good movie, I can very easily put myself in the place of a leading character.		
	Interpersonal Reactivity Index (IRI)	I tend to lose control during emergency situations.		
	Interpersonal Reactivity Index (IRI)	When I'm upset at someone, I usually try to "put myself in his shoes" for a while.		
	Interpersonal Reactivity Index (IRI)	When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.		
	Interpersonal Reactivity Index (IRI)	When I see someone who badly needs help in an emergency, I go to pieces.		
	Interpersonal Reactivity Index (IRI)	Before criticizing somebody, I try to imagine how I would feel if I were in their place.	GENERAL: Before criticizing somebody, I try to imagine how I would feel if I were in their shoes.	

	Source	Original Items	Survey Items	Scale
The Toronto Empathy Questionnaire: R. Nathan Spreng, Margaret C. McKinnon, Raymond A. Mar, Brian Levine J Pers Assess. Author manuscript; available in PMC 2009 Nov 10. Published in final edited form as: J Pers Assess. 2009 Jan; 91(1): 62–71.	Toronto Empathy Questionnaire	1. When someone else is feeling excited, I tend to get excited too.	STUDENT-ATHLETE: When a student-athlete is feeling excited, I tend to get excited too.	*Scoring* Item responses are scored according to the following scale for positively worded items 1, 3, 5, 6, 8, 9, 13, 16. Never = 0; Rarely = 1; Sometimes = 2; Often = 3; Always = 4. The following negatively worded items are reverse scored: 2, 4, 7, 10, 11, 12, 14, 15. Scores are summed to derive total for the Toronto Empathy Questionnaire.
	Toronto Empathy Questionnaire	2. Other people's misfortunes do not disturb me a great deal.	2. Student-athlete's misfortunes do not disturb me a great deal.	
	Toronto Empathy Questionnaire	3. It upsets me to see someone being treated disrespectfully.	3. It upsets me to see a student-athlete being treated disrespectfully.	
	Toronto Empathy Questionnaire	4. I remain unaffected when someone close to me is happy.		
	Toronto Empathy Questionnaire	5. I enjoy making other people feel better.		
	Toronto Empathy Questionnaire	6. I have tender, concerned feelings for people less fortunate than me.	STUDENT-ATHLETE: I have tender, concerned feelings for student-athletes.	
	Toronto Empathy Questionnaire	7. When a friend starts to talk about his/her problems, I try to steer the		

	Source	Original Items	Survey Items	Scale
		conversation towards something else.		
	Toronto Empathy Questionnaire	8. I can tell when others are sad even when they do not say anything.	STUDENT-ATHLETE: I can tell when a student-athlete is sad, even when they do not say anything.	
	Toronto Empathy Questionnaire	9. I find that I am "in tune" with other people's moods.	STUDENT-ATHLETES: I find that I am "in tune" with student-athletes' moods.	
	Toronto Empathy Questionnaire	10. I do not feel sympathy for people who cause their own serious illnesses.		
	Toronto Empathy Questionnaire	11. I become irritated when someone cries.	11. I become irritated when a student-athlete cries.	
	Toronto Empathy Questionnaire	12. I am not really interested in how other people feel.	STUDENT-ATHLETES: I am not really interested in how student-athletes feel.	
	Toronto Empathy Questionnaire	13. I get a strong urge to help when I see someone who is upset.	13. I get a strong urge to help when I see a student-athlete who is upset.	
	Toronto Empathy Questionnaire	14. When I see someone being treated unfairly, I do not feel very much pity for them.		
	Toronto Empathy Questionnaire	15. I find it silly for people to cry out of happiness.		
	Toronto Empathy Questionnaire	16. When I see someone being taken advantage of, I feel kind of protective towards him/her.		

	Source	Original Items	Survey Items	Scale
Self-Efficacy				
SELF-EFFICACY FORMATIVE QUESTIONNAIRE Reference: Gaumer Erickson, A.S. & Noonan, P.M. (2018). Self-efficacy formative questionnaire. In The skills that matter: Teaching interpersonal and intrapersonal competencies in any classroom (pp. 175-176). Thousand Oaks, CA: Corwin.	Self-Efficacy Formative Questionnaire	1. I can learn what is being taught in class this year.	I can learn what is being taught in the NCAA Stakeholders Guide.	(1-5) Not very like me - Very like me)
	Self-Efficacy Formative Questionnaire	2. I can figure out anything if I try hard enough.	GENERAL: I can figure out anything in my clinical practice if I try hard enough.	
	Self-Efficacy Formative Questionnaire	3. If I practiced every day, I could develop just about any skill.	If I practiced every day, I could develop just about any skill.	
	Self-Efficacy Formative Questionnaire	4. Once I've decided to accomplish something that's important to me, I keep trying to accomplish it, even it is harder than I thought.	GENERAL: Once I've decided to accomplish something that's important to my clinical growth, I keep trying to accomplish it, even if it's harder than I thought.	
	Self-Efficacy Formative Questionnaire	5. I am confident that I will achieve the goals I set for myself.	I am confident that I will achieve the goals I set for myself.	

	Source	Original Items	Survey Items	Scale
	Self-Efficacy Formative Questionnaire	6. When I'm struggling to accomplish something difficult, I focus on my progress instead of feeling discouraged.	When I'm struggling to accomplish something difficult, I focus on my progress instead of feeling discouraged.	
	Self-Efficacy Formative Questionnaire	7. I will succeed in whatever career path I choose.	GENERAL: I will succeed in my career as a mental health clinician. STUDENT-ATHLETES: I will succeed in my clinical work with student-athletes who have mental health concerns.	
	Self-Efficacy Formative Questionnaire	8. I will succeed in whatever college major I choose.		
	Self-Efficacy Formative Questionnaire	9. I believe my hard work pays off.	I believe hard work pays off.	
	Self-Efficacy Formative Questionnaire	10. My ability grows with effort.	GENERAL: My ability to be a good mental health clinician grows with effort. STUDENT-ATHETES: My ability to treat student-athletes who come into my office with mental health concerns grows with effort.	
	Self-Efficacy Formative Questionnaire	11. I believe that the brain can be developed like a muscle.	I believe that the brain can be developed like a muscle.	
	Self-Efficacy Formative Questionnaire	12. I think that no matter who you are, you can significantly change your level of talent.	I think that no matter who you are, you can significantly change your level of talent.	

	Source	Original Items	Survey Items	Scale
	Self-Efficacy Formative Questionnaire	13. I can change my basic level of ability considerably.	GENERAL: I can improve my basic level of clinical skills considerably. STUDENT-ATHLETES: I can improve my basic level of clinical skills to understand the unique needs of a student-athlete.	
General Self-Efficacy Scale (GSE). Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, Measures in health psychology: A user's portfolio. Causal and control beliefs (pp. 35-37). Windsor, UK: NFER-NELSON.	General Self-Efficacy Scale (GSE)	1. I can always manage to solve difficult problems if I try hard enough.		1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true
	General Self-Efficacy Scale (GSE)	2. If someone opposes me, I can find the means and ways to get what I want.		
	General Self-Efficacy Scale (GSE)	3. It is easy for me to stick to my aims and accomplish my goals.		
	General Self-Efficacy Scale (GSE)	4. I am confident that I could deal efficiently with unexpected events.	GENERAL: I can deal efficiently with unexpected events when students come into my office for mental health treatment. STUDENT-ATHLETES: I can deal efficiently with	

	Source	Original Items	Survey Items	Scale
			unexpected events with student-athletes.	
	General Self-Efficacy Scale (GSE)	5. Thanks to my resourcefulness, I know how to handle unforseen situations.	GENERAL: I know how to handle unforeseen situations with students. STUDENT-ATHLETES: I know how to handle unforeseen situations with student-athletes.	
	General Self-Efficacy Scale (GSE)	6. I can solve most problems if I invest the necessary effort.		
	General Self-Efficacy Scale (GSE)	7. I can remain calm when facing difficulties because I can rely on my coping abilities.	GENERAL: I can remain calm when facing difficulties with students. STUDENT-ATHLETES: I can remain calm when facing difficulties with student-athletes.	
	General Self-Efficacy Scale (GSE)	8. When I am confronted with a problem, I can usually find several solutions.		
	General Self-Efficacy Scale (GSE)	9. If I am in trouble, I can usually think of a solution.		
	General Self-Efficacy Scale (GSE)	10. I can usually handle whatever comes my way.	I can usually handle whatever comes my way in my clinical practice.	
Knowledge				

	Source	Original Items	Survey Items	Scale
		Athletics participation, athletics-related pressures, and athletic identity have a unique influence on student-athletes' mental health and mental health-related care seeking.		
		Strong and trusting partnerships between student health services and athletics are imperative to meet the mental health needs of student-athletes.		
		When providing treatment to a student-athlete, it is important to consider their team's norms related to mental health help seeking.	When providing treatment to a student-athletes, what is one of the most important things to consider, related to their mental health help-seeking?	team norms
		Clinicians should engage sport coaches in communicating effectively with student-athletes in support of help seeking.		
		I should engage athletic trainers in my mental health care provisions to student-athletes.	Which of the following people typically lead care coordination in an athletic setting, and may be a useful ally to mental health service provision (depending on student-athlete preferences related to confidentiality)?	athletic trainers

	Source	Original Items	Survey Items	Scale
		Student-athletes can play as leaders in the campus community, and should be encouraged to created a culture of health and safety within athletics.		
		Alcohol use is common among college student-athletes.	What is the most common substance used by college student-athletes	alcohol
		Self-reported marijuana use is lower among student-athletes than the non-athlete college population.	Marijuana use is _____ among student-athletes than among the non-athlete population.	lower
		It is not uncommon for student-athletes to feel overwhelmed by heightened time demands and to use substances as a way to manage this anxiety.		
		Compared to non-athletes, both female and male athletes are at a higher risk of developing an eating disorder.	All else equal, which of the following student-athletes is at the highest risk of developing an eating disorder?	women's gymnastics
		For some student-athletes, there can be risk for depression related to their participation in sport.		
		Student-athletes are at decreased or minimal depression risk.		

	Source	Original Items	Survey Items	Scale
		Anxiety disorders are the most common psychiatric problem for student-athletes.	What is the most common psychiatric disorder for student-athletes?	anxiety
		The majority of student-athletes get adequate, high-quality sleep		
		Many teams have early morning practices before class is in session.	As defined by NCAA regulations, what is the maximum number of hours a week that student-athletes are allowed to spend on required athletic activities?	20
		Chronic sleep concerns could lead to injury or inaccurate concussion assessment.	What psychological concern is most likely to lead to physical injury?	chronic sleep problems
Attitudes				
Sport Attitude Scale The lead investigator is Dr. Cengiz Yakut: Health and Physical Education Department Lock Haven University of Pennsylvania Lock Haven, PA tps://www.surveymonkey.com/r/THGDX5S	Sport Attitude Survey	I could live a happy life without watching sports.	I could live a happy life without watching sports.	(1-7) Strongly disagree to Strongly agree
	Sport Attitude Survey	Sports in my country help people of different ethnic or racial groups to come closer together.	Sports in my country help people of different ethnic or racial groups to come closer together.	

	Source	Original Items	Survey Items	Scale
	Sport Attitude Survey	A young man who doesn't like sports can hardly be considered manly.		
	Sport Attitude Survey	I feel proud when my national teams win in international competition.	I feel proud when my school's teams win in competition.	
	Sport Attitude Survey	International sports competitions are good for improving international relations.		
	Sport Attitude Survey	My family spends a great deal of time watching sports.		
	Sport Attitude Survey	It's a good thing when my national sports teams include athletes from different ethnic and racial groups.	It's a good thing when my school's sports teams include athletes from different ethnic and racial groups.	
	Sport Attitude Survey	I would be uncomfortable playing sports with homosexual teammates.		
	Sport Attitude Survey	The purpose of competition is to eventually see which team or athlete is the best or who is number one.	The purpose of competition is to eventually see which team or athlete is the best or who is number one.	
	Sport Attitude Survey	I am worried that some sports today can cause serious body and brain injuries.		
	Sport Attitude Survey	One should never "run up the score" on an opponent who is being badly beaten.		

	Source	Original Items	Survey Items	Scale
	Sport Attitude Survey	You can't worry about injuries in sports because the athletes all know the risks.	You can't worry about injuries in sports because the athletes all know the risks.	
	Sport Attitude Survey	The authorities should make sure that sports opportunities are available to everyone (male or female, rich or poor, young or old).	School authorities should make sure that sports opportunities are available to everyone (male or female, rich or poor, young or old).	
	Sport Attitude Survey	I like to see fights break out in sporting contests.		
	Sport Attitude Survey	Playing sports helps build the character of young people.	Playing sports helps build the character of young people.	
	Sport Attitude Survey	The records of athletes who take performance enhancing drugs should not count.		
	Sport Attitude Survey	Athletes are positive role models for young people.	Student-athletes are positive role models for young people.	
	Sport Attitude Survey	I count the medals my team and other nations win in Olympic competition.		
	Sport Attitude Survey	Sports are a way for talented poor athletes to become successful in life.	Sports are a way for talented poor athletes to attend college.	
	Sport Attitude Survey	A national team should not include athletes from any other nation.		

	Source	Original Items	Survey Items	Scale
	Sport Attitude Survey	Famous athletes are very important people in our society.	Student-athletes view themselves as very important people on my campus.	
	Sport Attitude Survey	It disturbs me when gay and lesbian athletes represent my country in a sport competition.		
	Sport Attitude Survey	I like sports where there is aggressive physical contact.		
	Sport Attitude Survey	Athletes are good role models for me.	Athletes are good role models.	
	Sport Attitude Survey	Compared to the rest of the population athletes tend to commit more aggressive crimes such as spousal abuse, rape, and assault.	Student-athletes tend to commit more aggressive crimes than other students.	
	Sport Attitude Survey	Compared to people generally many athletes feel they are above the laws and norms of society and are entitled to special treatment by authorities.	Student-athletes feel they are entitled to special treatment by university authorities.	
	Sport Attitude Survey	Compared to people generally many athletes feel they are above the laws and norms of society and are entitled to special treatment by authorities.	Many student-athletes feel they are above the roles on campus.	
	Sport Attitude Survey	When an athlete makes a mistake that loses an important game, he or she	When an athlete makes a mistake that loses an important game, he or she	

	Source	Original Items	Survey Items	Scale
		should feel ashamed and apologize.	should feel ashamed and apologize.	
	Sport Attitude Survey	I attend my favorite team's games even if it is having a losing season.		
	Sport Attitude Survey	Athletes from certain ethnic or racial groups are innately better in certain sports.		
	Sport Attitude Survey	I like to attend sports events with my family or friends.	I like to attend sports events with my family or friends.	
	Sport Attitude Survey	I get a thrill watching athletes do what I dreamed of doing.	I get a thrill watching athletes do what I dreamed of doing.	
Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi. D., Oishi, S., & Biswas-Diener, R. (2009). New measures of well-being: Flourishing and positive and negative feelings. Social Indicators Research, 39, 247-266. https://www.psytoolkit.org/survey-library/pts.html	Positive Thinking Scale.	(reverse) I see my community as a place full of problems.	I see the Athletics Department as a place full of problems.	Yes or No
	Positive Thinking Scale.	I see much beauty around me.		
	Positive Thinking Scale.	I see the good in most people.	I see the good in most student-athletes.	
	Positive Thinking Scale.	(reverse) When I think of myself, I think of many shortcomings.		

	Source	Original Items	Survey Items	Scale
	Positive Thinking Scale.	I think of myself as a person with many strengths.		
	Positive Thinking Scale.	I am optimistic about my future.		
	Positive Thinking Scale.	(reverse) When somebody does something for me, I usually wonder if they have an ulterior motive.		
	Positive Thinking Scale.	When something bad happens, I often see a "silver lining," something good in the bad event.		
	Positive Thinking Scale.	I sometimes think about how fortunate I have been in life.		
	Positive Thinking Scale.	(reverse) When good things happen, I wonder if they might have been even better.		
	Positive Thinking Scale.	(reverse) I frequently compare myself to others.		
	Positive Thinking Scale.	(reverse) I think frequently about opportunities I missed.		
	Positive Thinking Scale.	When I think of the past, the happy times are most salient to me.		
	Positive Thinking Scale.	I savor memories of pleasant past times.		
	Positive Thinking Scale.	(reverse) I regret many things from my past.		

	Source	Original Items	Survey Items	Scale
	Positive Thinking Scale.	When I see others prosper, even strangers, I am happy for them.	When I see student-athletes prosper, I am happy for them.	
	Positive Thinking Scale.	(reverse) When I think of the past, for some reason bad things stand out.		
	Positive Thinking Scale.	I know the world has problems, but it seems like a wonderful place anyway.		
	Positive Thinking Scale.	(reverse) When something bad happens, I ruminate on it for a long time.		
	Positive Thinking Scale.	(reverse) When good things happen, I wonder if they will soon turn sour.		
	Positive Thinking Scale.	(reverse) When I see others prosper, it makes me feel bad about myself.		
	Positive Thinking Scale.	I believe in the good qualities of other people.	I believe in the good qualities of student-athletes.	
Intentions				
Like, R. C. (2011). Educating clinicians about cultural competence and disparities in health and health care. Journal of Continuing Education in the Health Professions, 31(3), 196-206.	Clinical Cultural Competency Questionnaire	1. Greeting patients in a culturally sensitive manner.		How SKILLED are you in dealing with sociocultural issues in the following areas of patient care? Not at all - A little - Somewhat - Quite a bit - Very

	Source	Original Items	Survey Items	Scale
	Clinical Cultural Competency Questionnaire	2. Eliciting the patient's perspective about health and illness (e.g., its etiology, name, treatment, course, prognosis)		
	Clinical Cultural Competency Questionnaire	3. Eliciting information about use of folk remedies and/or other alternative healing modalities		
	Clinical Cultural Competency Questionnaire	4. Eliciting information about use of folk healers and/or alternative practitioners		
	Clinical Cultural Competency Questionnaire	5. Performing a culturally sensitive physical examination		
	Clinical Cultural Competency Questionnaire	6. Providing culturally sensitive patient education and counseling	To tailor my counseling practices specifically to meet the needs of student-athletes.	
	Clinical Cultural Competency Questionnaire	7. Providing culturally-sensitive preventative services		
	Clinical Cultural Competency Questionnaire	8. Providing culturally sensitive end of life care		
	Clinical Cultural Competency Questionnaire	9. Assessing health literacy		
	Clinical Cultural Competency Questionnaire	10. Working with medical interpreters		
	Clinical Cultural Competency Questionnaire	11. Dealing with cross-cultural conflicts relating to diagnosis or treatment		

	Source	Original Items	Survey Items	Scale
	Clinical Cultural Competency Questionnaire	12. Dealing with cross-cultural adherence/compliance problems		
	Clinical Cultural Competency Questionnaire	13. Dealing with cross-cultural ethical conflicts		
	Clinical Cultural Competency Questionnaire	14. Apologizing for cross-cultural misunderstandings or errors	To apologize to student-athletes for misunderstandings about their needs.	
	Clinical Cultural Competency Questionnaire	15. Prescribing/negotiating a culturally sensitive treatment plan	To address treatment plan or care coordination compliance problems with student-athletes I treat.	
	Clinical Cultural Competency Questionnaire	1. Caring for patients from culturally diverse backgrounds	To provide care to students from diverse campus groups or affiliations, including athletics.	How COMFORTABLE do you feel in dealing with the following cross-cultural encounters or situations? Not at all - a little - somewhat - quite a bit - very
	Clinical Cultural Competency Questionnaire	2. Caring for patients with limited English proficiency		
	Clinical Cultural Competency Questionnaire	3. Caring for patients who insist on using or seeking folk healers or alternative therapies		
	Clinical Cultural Competency Questionnaire	4. Identifying beliefs that are not expressed by a patient or caregiver but might interfere with the treatment regimen		

	Source	Original Items	Survey Items	Scale
	Clinical Cultural Competency Questionnaire	5. Being attentive to nonverbal cues or the use of culturally specific gestures that might have different meanings in different cultures	To be attentive to nonverbal cues that might have different meanings in athletics.	
	Clinical Cultural Competency Questionnaire	6. Interpreting different cultural expressions of pain, distress and suffering		
	Clinical Cultural Competency Questionnaire	7. Advising a patient to change behaviors or practices related to cultural beliefs that impair one's health		
	Clinical Cultural Competency Questionnaire	8. Speaking in an indirect rather than direct way to a patient about their illness if more culturally appropriate		
	Clinical Cultural Competency Questionnaire	9. Breaking "bad news" to a patient's family first rather than to the patient if this is more culturally appropriate		
	Clinical Cultural Competency Questionnaire	10. Working with health care professionals from culturally diverse backgrounds		
	Clinical Cultural Competency Questionnaire	11. Working with a colleague that makes derogatory remarks about patients from a particular ethnic group		

	Source	Original Items	Survey Items	Scale
	Clinical Cultural Competency Questionnaire	12. Treating a patient who makes derogatory comments about your racial or ethnic background		
Demographics				
			What is the highest degree you have achieved?	Bachelors, Masters, PhD, PsyD, MD, other
			What type(s) of clinical licensure do you have?	Select all that apply: LPC, LCSW, Psychologist, Psychiatrist, other
			Which of the following professional organizations do you belong to?	Select all that apply: ASWIS, ACCA, ACA, APA, Big Sky, CCSPA, NASW, other
			How many years have you provided licensed, clinical mental health care in any setting?	Years 0-100
			How many years have you provided licensed, clinical mental health care in a college/university setting?	Years 0-100
			Administratively, which department(s) on campus do you report to?	Select all that apply: Academic dept, athletics, counseling center, student health services, student life, other
			Have you ever received cultural competency training, related to the various unique needs of your student population?	Yes/no

	Source	Original Items	Survey Items	Scale
			In which of the following settings did you receive cultural competency training?	Select all that apply: Certificate program, graduate school, professional development, other
			If you know what association your school's athletic teams participate in, please indicate below	NCAA Div I, NCAA Div II, NCAA Div III, NAIA, NJCAA, NCCAA, other, I don't know
			Have you ever received training related to the unique needs of student-athletes?	yes/no
			In which of the following settings did you receive training related to the unique needs of student-athletes?	Select all that apply: certificate program, graduate school, professional development, other
			Approximately what percentage of your caseload is made up of student-athletes?	Percent 0-100

	Source	Original Items	Survey Items	Scale
			What type(s) of sports have you participated in?	Select all that apply: I never played sports, I never played organized sports, but enjoy(ed) playing sports with my friends, Youth club or recreation sports, Youth travel/AAU, high school, college club or intramural sports, college intercollegiate, professional
			Which gender do you most identify with?	Male, female, transgender female, transgender male, gender variant/non-conforming, other, prefer not to answer
			Which race do you most identify with?	Select all that apply: American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander, White, Other